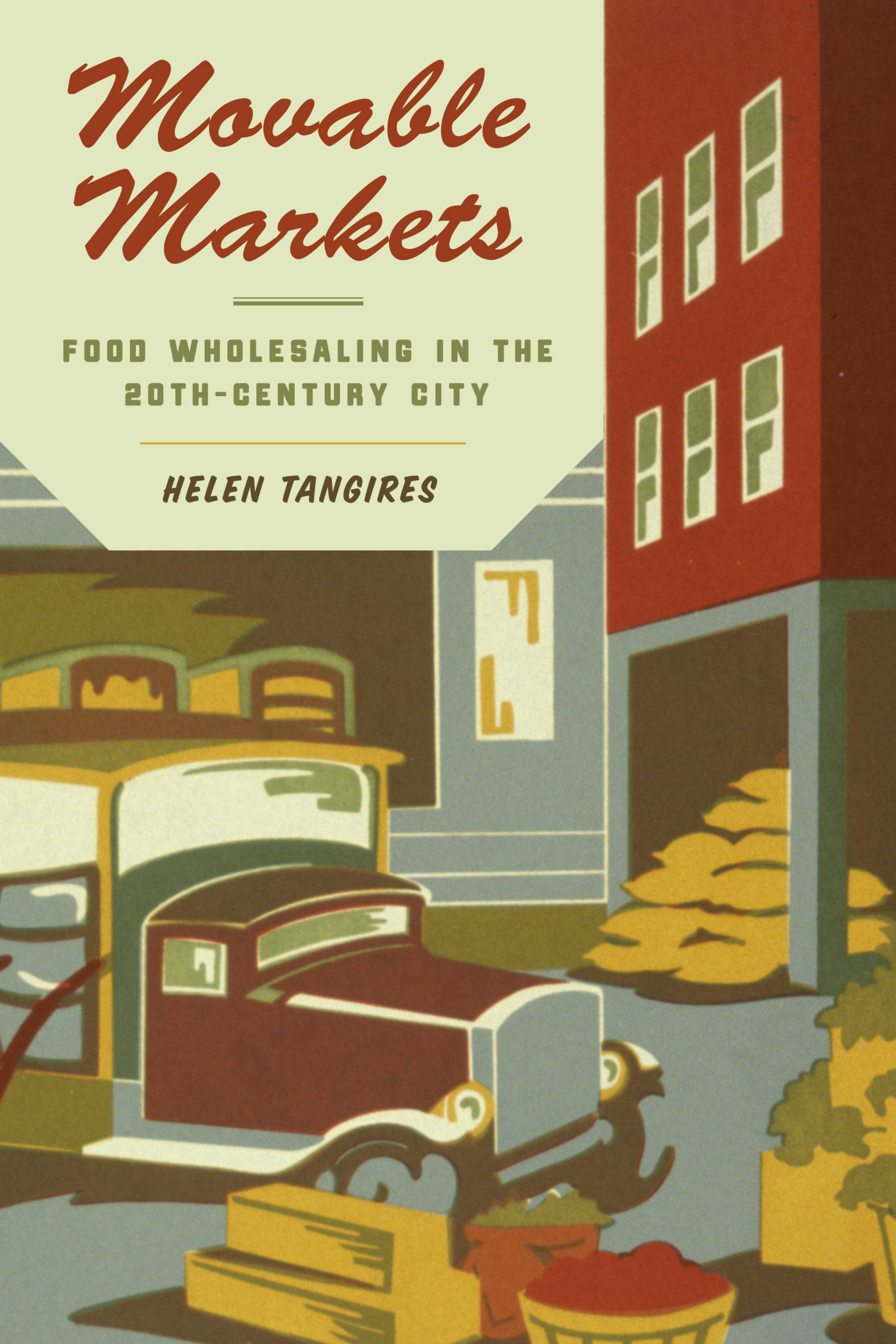
Movable Markets

FOOD WHOLESALING IN THE 20TH-CENTURY CITY

HELEN TANGIRES



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Movable Markets

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Richard R. John, *Series Editor*

MOVABLE MARKETS

Food Wholesaling
in the
Twentieth-Century City

Helen Tangires

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Robert J. Brugger encouraged me early on to consider Johns Hopkins University Press's series Hagley Library Studies in Business, Technology, and Politics, and it was this suggestion that marked a turning point in the book project. This led me to Richard R. John, who welcomed the topic of food wholesaling into the series with an enthusiasm that kept me moving forward. Richard challenged me to pursue directions that I would have otherwise not taken, and I am grateful for his astute observations, guidance, and constant support. Likewise, I thank the anonymous readers who took precious time to evaluate earlier versions of the manuscript and who provided constructive criticism. To the press, I am particularly grateful for the support of Matthew McAdam, senior acquisitions editor; Juliana McCarthy, managing editor; and William Krause, editorial assistant, as they helped me move the manuscript through the pipeline from draft to publication. Nicole Wayland was a wonderful partner throughout the copyediting process.

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My sisters, Dimitra Tangires and Mary Wojnowski, have shared many middlemen encounters with me, beginning with our childhood memories of arabbers—the African American street merchants who sell fruits and vegetables from horse-drawn carts through the streets of Baltimore. These hucksters often awakened us in the early morning hours with their colorful calls as they passed through the alley behind our West Baltimore row house. Only now do I know that the arabbers began their day's journey stocking their wagons at the wholesale markets downtown. My sisters and I also worked together for years at Blue Top Diners, the family diner and lunch wagon business (which predated the trendy food trucks) located near the former American Can Company on Boston Street, where freight tracks still ran along the industrial waterfront. We sometimes picked up our father's food orders at the wholesale fish market (now Port Discovery Museum) and at the old wholesale produce market on Pulaski Highway; to this day, we share stories with relatives and friends who spent their lives in and around Baltimore's public markets.

My cousins, too many to mention by name, have also contributed to this project in incidental ways, but a few deserve special mention. Jim Henry clarified the job of the commission merchant as he remembered it, based on the experience of his father, Timothy Edgar, and his grandfather, James, who operated under city license at the Baltimore Marsh Market. I also thank Dimitri Kinigopoulos for the tour of the Maryland Wholesale Produce Market in Jessup and Karen Kaludis and Tom Filbert for guidance on how to interpret some of the judicial opinions and historic court cases cited in the book.

Last but not least, I thank my parents, William and Georgia Tangires, who brought me into the world of family and business relations that inevitably involved food. Dad kept the coffee poured and the meals and homemade bread on the table, while mom listened patiently to our stories and food adventures, which she must have heard a thousand times.

Therefore, thanks to my extended family, many of whom tend home vegetable gardens; still shop or work at public markets; run bakeries, restaurants, and diners; deliver produce; enjoy cooking at home; sell food wholesale; sell food retail; and cannot resist buying bulk for cheap at Sam's Club.

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ACRONYMS

AAA	Agricultural Adjustment Act
AMS	Agricultural Marketing Service
BAE	Bureau of Agricultural Economics
CFA	United States Commission of Fine Arts
D-LMA	Downtown–Lower Manhattan Association
FAO	Food and Agriculture Organization of the United Nations
FERA	Federal Emergency Relief Administration
FSA-OWI	Farm Security Administration–Office of War Information
FTC	Federal Trade Commission
GPO	United States Government Printing Office
NCPPC	National Capital Park and Planning Commission
NIRA	National Industrial Recovery Act
PMA	Production and Marketing Administration
PWA	Public Works Administration
RMA	Research and Marketing Act of 1946
SOM	Skidmore, Owings & Merrill, Architects
UFFVA	United Fresh Fruit and Vegetable Association
USDA	United States Department of Agriculture
WPA	Works Progress Administration

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Introduction

On the cold early morning of December 15, 2001, I made the twenty-five-mile drive north on Interstate 95 from Washington, DC, to the Maryland Wholesale Produce Market in Jessup in order to do field research. My first stop was the parking lot of a nearby McDonald's to meet up with my cousin Jimmy, who was my informant and tour guide for the day. Jimmy knew the food center well, ever since it opened in 1976, in his capacity as a middleman—someone who buys in order to sell again. He owned his own truck, purchased produce for resale, and delivered to restaurants in the Baltimore-Washington area. He used to sell top-quality tomatoes to upscale establishments until he became frustrated with their perfectionist demands that too often resulted in rejected deliveries. Now, he was a self-described specialist in "seconds"—the imperfect but flavorful tomatoes that he guaranteed at the lowest price to less finicky clients. We proceeded in Jimmy's truck to the market terminal, passed through the controlled entrance gate, and parked next to a loading dock in front of a lengthy row of unimposing stores built of reinforced concrete. Rail sidings were still visible, but the only delivery vehicles were several refrigerated trucks backed up to the platform. The market was unusually quiet, as Jimmy explained, because it was a Saturday; it was later in the morning after unloading had ended; and it was not the season for regional farm produce. Each merchant store was the same size as the next and each enclosed nothing more than a small office and a storeroom sealed off from the platform by a rolling steel door. Tony Vitrano Co., a long-standing tenant, was open for business, and sample crates of produce open for handling and inspection by buyers filled the standard wooden display counter at the store's entrance. Drab fluorescent lighting, exposed concrete block walls, and steel shelving stacked ceiling high with cases of Florida and California produce, particularly the citrus fruits popular around the winter holidays, marked the store interior. After taking some photos and meeting several dealers, we left the market with a minimum required case of produce—some branded Florida Classic Oranges that Jimmy sampled and negotiated for me as a gift.

The Maryland Food Center Authority established the four-hundred-acre industrial park whose other long-standing tenants include a wholesale seafood market as well as distribution warehouses for Giant (a regional supermarket chain), Del Monte, and Sysco (a multinational food distributor). The state-sponsored authority also leases space to other firms engaged in businesses now broadly defined as the food industry—everything ranging from a banana ripening plant, cold and dry storage, and hotel/restaurant supply distributors, to frozen food processors, vegetable packaging plants, and refrigerated truck services and rental. A motel, drive-in bank, gas station, and several fast food outlets offering twenty-four-hour conveniences also occupy the site, whose stated goal is to serve as the principal hub for the development and distribution needs of Maryland's food industry.

Throughout the nineteenth century and until the establishment of the food center in Jessup, the hub of food distribution in Maryland was the port city of Baltimore—not only the largest food-consuming city in the state but also a preeminent redistribution point for perishable produce. Baltimore was one big wholesale center, where public and private enterprise worked in combination to supply the city and region with a variety of commodities that came from around the world by various forms of transport. Municipal wharves and piers lined the Inner Harbor on the northwest branch of the Patapsco River, where steamships and boats delivered produce. Received goods were unloaded on team tracks at the Pennsylvania Railroad Produce Terminal and the Baltimore and Ohio (B&O) yards at Camden Street. Produce handlers might then transfer merchandise from the rail yards to the canneries or fruit auctions or direct it to the wholesale stores at Camden Street or Market Place, where other handlers broke it down into smaller job lots for transfer once again to other towns supplied by the Baltimore market. Part of the incoming food supply also went to Center Market (aka Marsh Market)—the municipal wholesale fish and produce markets where commission merchants and other kinds of food purveyors exchanged with local buyers for grocery stores, meat shops, pushcarts, huckster wagons, restaurants, hotels, lunchrooms, or public market stalls. Household buyers and boarding house operators in search of bargains and bulk produce also patronized Center Market on occasion (fig. I.1).

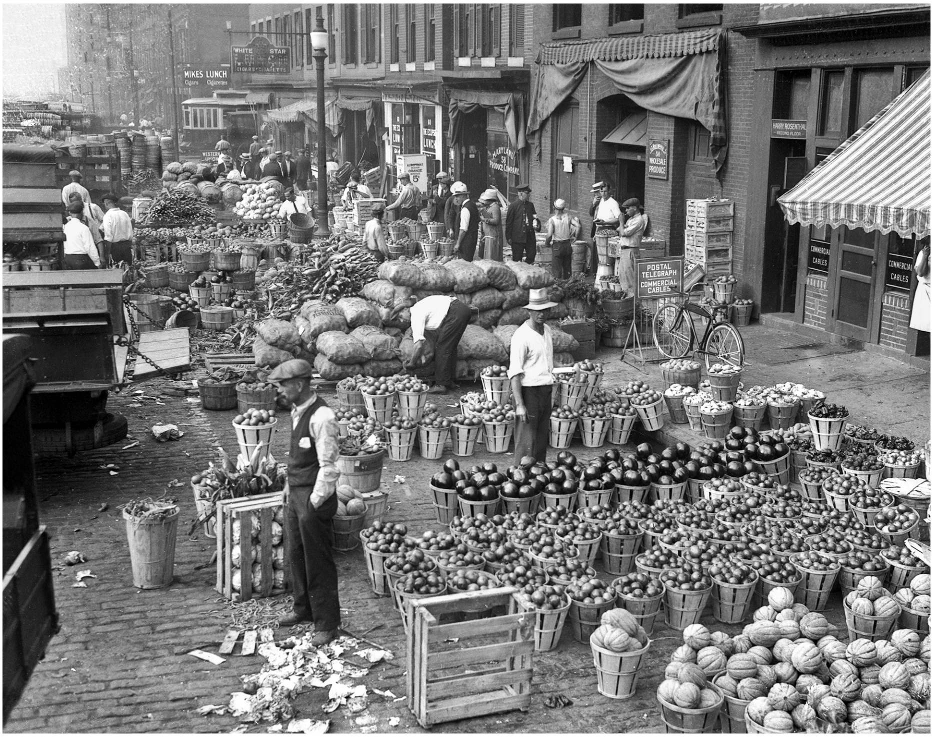

Figure I.1. *Marsh Market, Baltimore, ca. 1930.* A. Aubrey Bodine, photographer. Baltimore City Life Museum. Special Collections Department. Courtesy of the Maryland Historical Society, MC8265-E.

All this motion involved a complex network of middlemen—the catchall phrase that encompasses the individuals and firms who handle produce from farm to table. Regardless of occupational specialty, they share the goal of getting perishable produce to the next step on the way to its final destination, as they still do today. In the urban context—the focus of this book—they specialize in handling produce on its arrival in the city and distribute it within the city and to points beyond. Some individuals and firms manage the unloading of ships, trains, or trucks, or specialize in packing, cold storage, or warehousing. Others operate produce auctions, packinghouses, commission houses, or wholesale stores. City wholesalers also deliver produce to hotels, restaurants, retail stores, and food processors, or simply negotiate orders for their buyers.

Before the trade relocated to the Maryland Food Center, city wholesalers extended into every nook and cranny of Baltimore's Inner Harbor, including a variety of spaces that ranged from the docks, wharves, piers, and rail yards, to the streets, alleys, sidewalks, and squares. They occupied physical workplaces that ranged widely in size, scale, and age—everything from a wooden- or steel-frame shed, repurposed nineteenth-century brick row house, or multistory building with a formerly fashionable cast-iron facade, to a cold storage warehouse, packing plant, mammoth freight terminal building, or market hall. Their activities required a regulatory system that evolved constantly, as did the wholesale produce trade overall, with municipal ordinances that dictated everything from hours of operation, licensing, health codes, and parking restrictions, to federal regulations governing interstate trade, standard containers, and warehousing.

Today, however, Baltimore is but a palimpsest of its former glory when it was *the* gateway for the region's food supply—years before the Maryland Food Center in Jessup took the title. The majestic B&O Warehouse built in 1899 and often purported to be the longest brick building on the East Coast stands adjacent to Oriole Park at Camden Yards and now serves the baseball team for office space and private club activities. In place of the wharves, piers, and warehouses that once lined the waterfront stands Harborplace—the 1980 festival marketplace designed by Rouse and Company as a shopping, dining, and entertainment destination. Just east of Harborplace, the Port Discovery Children's Museum occupies the former municipal fish market that was built after the Baltimore Fire of 1904 and ceased operation in 1984.

Despite the exodus of Baltimore's wholesale fruit and vegetable dealers from the urban core in 1976, they and their suppliers and buyers adjusted to and indeed benefited from life beyond the city limits. The design for the new food center in Jessup, Maryland, emphasized the site as a self-contained, planned community in which to resettle the downtown trade. The state market authority promoted the facility as a food park, with a greenbelt surrounding rows of uniform stores, each equipped with twenty-foot front and rear loading docks with twenty-foot ceiling clearances. Wholesalers and their buyers would have ease of access for maneuvering truck and rail service, buyers for multiple food products and supplies could enjoy one-stop shopping, and the landlocked facility would offer suppliers and their customers an alternative to the crowded city (fig. I.2). In 1984, a decade after the fruit and vegetable dealers moved to Jessup, the downtown wholesale fish market closed and the dealers joined their fruit and vegetable counterparts at the industrial park, where the trade now serves a global food network—sourcing and shipping products over thousands of miles and across conti-

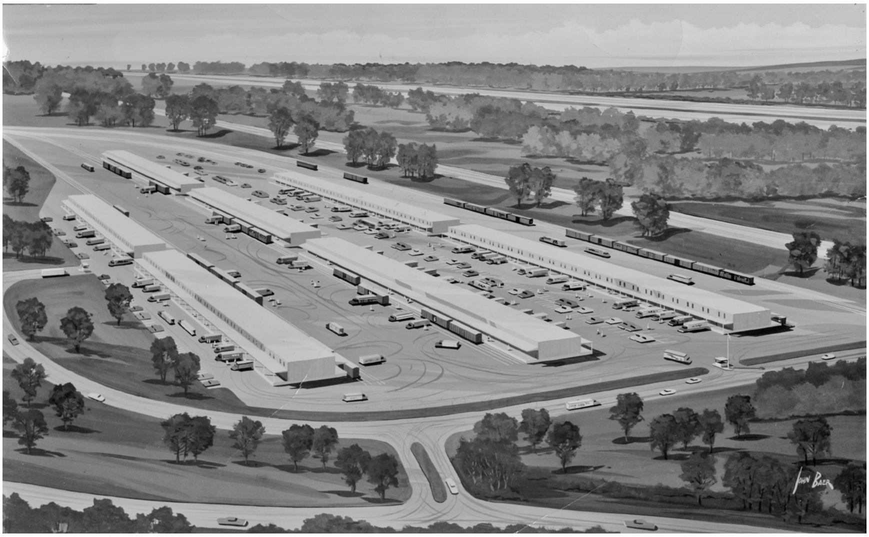

Figure I.2. *Architectural Rendering for the Proposed Greater Baltimore Wholesale Food Market Authority, ca. 1969.* Robert H. Sippel, architect. From Greater Baltimore Consolidated Wholesale Food Market Authority, *Annual Report, June 30, 1969* (Baltimore, 1969). Maryland State Archives.

nents. The stores and adjunct buildings accommodate independent wholesalers who specialize or engage in food processing, packaging, distribution, and frozen food storage; highway access has broadened the market's access for retailers and institutional buyers throughout the mid-Atlantic region.

The Maryland Food Center has been a locus for continuous integration in the food industry and a place where the entire process from food assembling to retailing has taken shape. One can read this evolution in the statutory changes to the name of the state market authority over the decades. First authorized in 1943, the Commission on Baltimore Wholesale Fruit and Vegetable Markets acknowledged the initial priority of organizing a new place for the city's fruit and vegetable trade; by 1967, the reauthorized Greater Baltimore Consolidated Wholesale Food Market Authority expanded its geographical scope beyond the city limits and embraced wholesale foods more broadly. Renamed again in 1979, the Maryland Food Center Authority extended its allegiance beyond Baltimore and to the entire state of Maryland, and it dropped the word "wholesale" from its official name as it embraced all sectors of the food industry. Today, the Maryland Food Center is not only one of the largest markets in the mid-Atlantic region but is also a member of the World Union of Wholesale Markets—an international organization devoted to active engagement in collective problem-solving in the food industry. Members share common ethical and social values regarding food distribution, and they seek to strengthen relationships between market authorities and the diversity of wholesalers, farmers, retailers, and producers who define the industry.[1]

How, though, do we account for the transformation of a trade historically rooted in the city's infrastructure and political economy to an industry whose wholesale sector operates on the urban periphery in the context of a global food economy? Moreover, why does this transformation matter? This book offers some possible answers to these questions by following the changing functions and localities of wholesale dealers over time and place, the various stages of their regulatory control, and the evolving role of federal and state government in the marketing and distribution of agricultural produce. Two kinds of shelter prevail in this narrative: (1) the regulatory protection that government afforded to intermediaries in the marketing and distribution of perishables, and (2) the physical and spatial shelter that enabled them to carry on their trade. Both kinds of shelter guaranteed the movable feast, whose history is defined by the quest to employ the necessary regulatory, physical, and organizational structures required to supply an urban population with fresh food.

Moving beyond Baltimore

The idea for a broad study of food wholesaling in the twentieth-century city evolved naturally from my earlier work on the public market system in nineteenth-century America, when municipal deregulation of the butcher trade and state-incorporated market companies challenged traditional marketing norms. The subsequent proliferation of meat shops, market houses, and grocery stores brought fundamental changes to the food landscape and political economy in ways that created the conditions for the wholesale trade to flourish. This observation prompted me to look beyond retailing institutions and to investigate the myriad of new intermediaries who emerged as principal actors in the wake of a deregulated food economy—the wholesalers. The present volume, then, is an extension and sequel to earlier work, and with that challenge, I left the halls and stalls of the public markets to discover the world of the middlemen who handle the sale and distribution of produce that is then retailed by others.

The history of a trade that traditionally agglomerated around the central marketplaces was a story I knew superficially as a native Baltimorean. I witnessed the final years of the wholesale fish and produce markets operating in their historic location downtown (1960s), urban renewal and the forced move of the dealers to the Maryland Wholesale Food Center in Jessup (1970s), and the arrival of Harborplace—the waterfront redevelopment project designed to fill the void of a departing food industry (1980s). Delving into the project, I soon discovered that the trajectory of the wholesale trade in Baltimore was commonplace. Similar tales abound in other cities that experienced the rise of a bustling produce district only to see its demise and the relocation of the trade to the urban periphery.

Memory and nostalgia loomed large in the minds of dealers, suppliers, and their customers, who faced moving their places of exchange from historic quarters in the city center to planned wholesale markets located in semi-industrial zones. For the generations who had passed their lives in and around large city marketplaces in the United States or in their home countries, the market's visible and olfactory presence reassured them that a food provisioning system, though seemingly chaotic, was in place. Many of us can still recall the sights, sounds, tastes, and smells of a fish market on the waterfront; produce wilting in crates on a busy sidewalk in the heat of the summer; and the noise and congestion of food delivery trucks. We remember stopping by the produce district for lunch or on the way home from work for a meal or snack, venturing back into town on the weekend with the car to pick up a bushel of peaches or live crabs in season, or meeting friends for a market-fresh meal at an all-night diner. Whether we knew it or not, we were entering the world of the wholesalers, an experience one never forgets or regrets. It is the strength of this memory—of the wholesale marketplace for fresh food as a fundamental urban component—that informs food systems today, as we witness a proliferation of city farmers' markets, farm-to-table restaurants, and the redevelopment of warehouse districts as food destinations. Memory and nostalgia still contribute to the revival of some markets even as touristy versions of their former selves, as they did not only at Harborplace in Baltimore but also at Faneuil Hall Market in Boston or South Street Seaport in New York. These festival marketplaces remind us of long-fought battles to keep food exchange a visible, public, and urban activity, no matter how incidental.

The exodus of the wholesale trade from large cities required planning, experimentation, collective problem-solving, and the communication of ideas through visual aids such as maps, graphs, flow charts, plans, and photography to impart change. For this reason, images persist as important artifacts in this narrative. Two photographs served as my initial inspiration. Both are scenes of Jim's Lunch, my grandfather's lunch stand at the old Marsh Market in Baltimore. One photograph, in the National Archives, was taken in the 1930s by an anonymous USDA staff photographer on assignment to document the crowded traffic conditions and broken cobblestone-paved market plaza in the foreground, with the lunch stand clearly visible in the middle ground. It shares a folder with dozens of other USDA images that document infrastructure problems at wholesale markets in cities across the country in the 1930s and 1940s, from San Francisco, Los Angeles, Denver, and Kansas City, to Savannah, Philadelphia, New York, and Washington, DC.

The other photograph of Jim's Lunch is in the Baltimore City Life Museum Collection in the Maryland Historical Society. It was taken in 1947 by A. Aubrey Bodine, the renowned photojournalist who worked for the *Baltimore Sun*. Silhouetted in the foreground are farmer trucks, horse-drawn wagons, and produce crates in the shade of a cast-iron shed, with the lunch stand just beyond in a soft early morning light. The *Sun* published Bodine's photograph in an article on the merits of wholesale markets with a caption that read, "When the marketing housewife selects her vegetables she seldom gives a thought to the commission man through whom they reached the retail stalls. On Light Street and at Market Space these merchants are astir in the early hours of the morning, relaying produce from farms and freight yards."[2]

In essence, these two photographs capture a single wholesale market—in this case Baltimore's Marsh Market—that on the one hand was under scrutiny by a federal agency for its physical limitations and on the other hand celebrated by a local newspaper for its special atmosphere and public service. This dichotomy persists throughout this book, whose images confirm that while each wholesale market has a local story to tell, it also fits into the larger context of urban food provisioning in the United States—a system defined by the ubiquitous fight to keep food fresh on its journey from farm to table.

The history of food wholesaling in the United States as told through the lens of a specific city, market, commodity, technological innovation, or moment in time cannot do justice to the complex political and economic forces that have guided its evolution. For this reason, I have chosen a broad approach to the wholesale trade in fresh food, from its starting place in the city, to the expansion of federal and state intervention in its activities, and shifting organizational practices and places of operation over time. This book explores food wholesaling in the context of US history, food history, urban history, economic geography, and history of the built environment. It introduces the network of individuals, businesses, governments, and institutions that shaped the urban marketplace for fresh food through decades of experimentation and collaboration. It also follows the wholesale produce market as an architectural form that was improvised, modified, classified, standardized, and commodified, as the industry evolved codependent with the buildings and spaces in which it operated. It invites further exploration and new scholarship from a variety of other perspectives—work that might invigorate gender studies, labor history, and business history, or case studies on specific cities, commodities, technologies, planning systems, or comparative, transnational histories.

Scope of the Book

Three formative periods define the history of food wholesaling in the American city. Although the book's principal time frame is the twentieth century, part I, "Open Entry," spans the decades from 1850 to 1900, introduces the actors, and sets the scene for the changes to come. During this era, food wholesaling expanded in a free-market system of provisioning. Open entry into the food trade and the weakening of special privileges formerly granted by the municipality stimulated new food supply networks. The traditional all-purpose merchant gave way to a new class of dealers who operated under general incorporation laws of the state to act as intermediaries. These dealers assumed specialized functions in the movement of perishables from their points of production to consumption. They operated in improvised places and were concentrated in the heart of the city, where the produce district took shape outside of the traditional boundaries of the municipal public market system. The liberal political economy and an expanding trade forced cities to loosen regulations on intermediaries in and around the public markets in order to stimulate competition in the prompt wholesale marketing and distribution of perishables on a large scale. Municipalities provided additional open space for farmers to supply storeowners and wholesalers with local and seasonal produce. Private speculators in commercial real estate also responded to the booming spatial requirements of middlemen who moved freely as shipping agents, commission merchants, auctioneers, wholesale dealers, brokers, exporters, handlers of freight, and cold storage operators.[3]

Wholesalers built their political and economic strength and created new markets for perishable produce by exploiting the benefits of refrigerated rail technology, the express service, and telegraphic news reports to communicate market prices and supplies for major commodities. Meat and grain were at the genesis of this development, and soon followed fruits, vegetables, and other farm produce—a process that firmly established distribution as an independent sector of the food economy alongside agricultural production. Long before a shopper filled his or her market basket, movable feasts traveled in carloads originating from new and distant points of production or distribution and were bound for large cities.[4]

Part II, "Consolidation," spans the years 1900 to 1930, when progressivism challenged the status quo for the produce district in cities where the movable feast had reached capacity. As the distribution sector of the food economy gained economic strength and spatial dominance, it fell under the same scrutiny and anti-monopoly debates that characterized other growing sectors of the American economy, such as communication and transportation.[5] The middleman epitomized everything that had gone wrong with a self-regulated trade that operated in improvised quarters within the confines of the commercial district. Criticism was aimed at the heart of a trade that was too dependent on rail carriers, speculated in supply and demand, and had a monopoly of location. Fruits and vegetables caused the greatest stress and alarm. As truck farms and market gardeners increased their production to meet consumer demand, refrigerated rail cars delivered their produce in volume to big-city markets. Produce met with traffic congestion, poor sanitation, aging infrastructure, and multiple handling in the distribution process—inefficiencies whose costs passed to the producer, shipper, wholesaler, retailer, and ultimately to the consumer.

The new principles of agricultural economics called for greater specialization in the marketing and distribution of agricultural produce combined with more effective government control. Experts in government, academics, and the food industry agreed that middlemen performed necessary functions in the marketing and distribution of perishables and that the task was to regulate and consolidate them in ways that enabled them to flourish, not perish.[6] Under the unifying banner of "market reform," public and private institutions pursued various strategies ranging in scope from the establishment of new municipal wholesale markets, curb markets, and other outlets for direct marketing, to produce auctions and freight terminals near railroad yards. Washington, DC, was an important testing ground and experimental laboratory for the first-time move of a vibrant downtown wholesale trade split between two planned terminals with rail service, cold storage, and truck loading facilities.

Part III, "New Frontiers," introduces the grower cooperative wholesale market, state-sponsored regional market for truck produce, and the state market authority as new instruments for financing and operating wholesale markets outside of the city center. Viewed in the context of federalism, this section highlights the USDA's efforts in guiding state, county, and local government to cooperate collectively with the food industry on long-term solutions for dealing with markets that had outlived effectiveness in their current locations. The Bureau of Agricultural Economics (BAE) and its successor agencies in the USDA were essential in this effort.[7]

Following passage of the Agricultural Research and Marketing Act of 1946, also known as the Hope-Flannagan Act, federal support for research, study, and experimentation in agricultural marketing provided cities with the plans and research required to implement long-awaited improvements. One by one, cities demolished their downtown produce districts, aided by urban renewal and the interstate highway system, and relocated dealers to state-sponsored regional markets for truck produce or to planned food industrial parks. The final chapter samples the Houston Produce Terminal (1954), Philadelphia Regional Produce Market (1958), San Francisco Wholesale Produce Market (1963), New York City Food Terminal at Hunt's Point (1967), and Maryland Wholesale Produce Market (1976). These "gated communities" of the food trade are located in semi-industrial sites and large enough to accommodate a broad range of food services and products. Based on modern food-handling systems and design principles, the new wholesale produce markets of the postwar era hastened the gradual disappearance of food wholesaling from the urban experience. At the same time, the wholesale trade used its new location to maintain consolidation, expand its stores and inventory, invest in new merchandising and packaging systems, and develop new markets and supply chains.[8]

The USDA as Common Denominator

The United States Department of Agriculture (USDA) was an important catalyst throughout this evolution, beginning in 1870, when Horace Capron, the first commissioner of agriculture, exposed the problems inherent in the distribution system for agricultural produce in large cities. The agency got traction in 1913, when the USDA established the Office of Markets to guide city marketing reform nationwide—a move that launched the agency as henceforth a key player. Agricultural economists and marketing specialists in the USDA championed the idea of wholesale terminal markets that would corral wholesalers into consolidated, purpose-designed facilities, for reasons that were both practical and economic. In the 1910s and 1920s, municipal market and planning commissions—in cities such as Boston, New York, Chicago, St. Louis, Seattle, and Los Angeles—considered building large-scale wholesale terminal markets, but most plans were too visionary and costly and they remained on paper.

Resisting change were the commission merchants, jobbers (who bought produce outright for sale to retailers), wholesale grocers, cold storage operators, retailers, and other members of the food trade who had a financial stake in maintaining their location despite its physical and operations limitations. They were satisfied with being close to one another and were content to operate in low-rent facilities or in buildings in which they had already invested. Furthermore, their codependency required that no one factor could move without the other, and the move of the entire trade would likely disrupt business relationships and increase operational costs. The lack of a unified voice for the trade was another factor that contributed to the status quo. By the 1920s, dozens if not hundreds of organizations representing handlers of perishable produce ranged in size, scope, and focus—everything from the Washington Boxed Apple Bureau, Long Island Cauliflower Association, and Western Fruit Jobbers Association, to the National Wholesale Grocers' Association of the United States, National League of Commission Merchants, and International Association of Refrigerated Warehouses. Moreover, the municipalities and railroad companies were too reticent to take on the risk of investing in new freight facilities and infrastructure sufficient to handle current and future volume.

The USDA was the unified voice, especially after 1922 when it established the BAE. As the largest single employer of agricultural economists and marketing specialists, the BAE sought to understand every step in the journey of food from farm to table, or the pipeline, in an effort to coordinate a more efficient system for distributing agricultural produce to city-dwelling populations. This quest brought the BAE into partnership not only with farm organizations, consumer advocacy groups, and extension services but also with state and municipal departments of agriculture and markets, city planning commissions, wholesale and retail trade associations, and members of the transportation industry. Moreover, while these partners had their own experts in matters relating to large city markets, they rarely acted alone or without the advice of the agricultural economists and marketing experts in the BAE. This breadth of collaboration and faith in the BAE established the agency as the driving force behind the very long and slow process of relocating major urban food markets.[9]

During the Depression and New Deal, the BAE promoted cost-effective alternatives to the wholesale terminal market such as the grower cooperative market, whose members contracted with certain railroads to gain exclusive access to marketing facilities on rail sidings. Key working models included the Denargo Market in Denver (Union Pacific), Northern Ohio Food Terminal in Cleveland (Nickel Plate), and Niagara Frontier Food Terminal in Buffalo (Nickel Plate). The BAE also worked with state departments of agriculture to establish wholesale markets for regional produce—providing them with architectural plans and operational guidelines. Model markets were in Benton Harbor, Michigan, and Newburgh, New York, whose facilities were relatively inexpensive to build and operate. Likewise, their locations optimized access to truck farmers whose business was on the rise in the wake of the Motor Carrier Act of 1935. The southern states of Florida and Georgia were also active during the New Deal in establishing regional markets in rural areas where there was room to handle out-of-state shipments of produce—a new link in the food supply chain that eliminated the need for conducting business in congested metropolitan areas.

After World War II, the long, detailed, hard work of the BAE had arrived at a high point in intellectual competence, staff expertise, broad public support, and recognition by the produce trade. Its recommendation to locate independent wholesalers to planned facilities located outside of the downtown commercial district persisted as a direct result of the Research and Marketing Act of 1946. The USDA studies funded by the act provided dozens of local planning officials with the expert plans they needed to move wholesale produce operations outside of the commercial district altogether, as they considered other uses for valuable downtown real estate. Although the federal government did not provide direct construction funds for new markets, it encouraged state and local government, the railroads, the produce trade, and the food industry to cooperate in doing so. New food centers were no longer physically central in the urban sense, but they provided a central place for the trade to agglomerate once again, in order to ensure the efficient movement of fresh food.

The USDA provided the wholesale trade with the options it needed to free itself from the confines of the city. Backed with models and building designs, site and layout options, refrigeration and transportation studies, guidelines for organization and financing, and marketing research, the USDA helped reconfigure the food map. It promoted new, quasi-public outlets for the marketing and distribution of agricultural produce—grower cooperative markets near the points of production and large terminals designed and located to serve as regional hubs in the food supply chain. Just as the municipality had once guaranteed an equitable place for buyers and sellers under the public market system, so too did federal and state departments of agriculture embrace wholesale markets as places that guaranteed ease of entry for dealers, a convenient place to facilitate inspection, room to exploit economies of scale, and a safety net for the urban consumer. The USDA was the "visible hand" that guaranteed the movable feast.[10]

A Historiographic Approach to Wholesale Markets

The wholesale marketplace for perishable food in large cities offers a path of historical inquiry inspired by a vast range of scholarship and methodologies. In thinking about how this history might be understood through the lens of a single city, standing out are several histories of urban marketplaces outside of the United States. Theodore C. Bestor's *Tsukiji: The Fish Market at the Center of the World* is the ambitious exploration of the wholesale fish and seafood market in Tokyo. Tsukiji is the largest market of its kind in the world in terms of volume of sales and boasts a time-honored auction system of licensed buyers and sellers. Tsukiji continues to make history while it is currently embroiled in a controversial relocation plan. Montserrat Miller's *Feeding Barcelona*, likewise, takes a long view of the historical relationship between the municipal wholesale markets and the vast network of neighborhood retail markets whose network of buildings, people, and produce continues to define the identity, economy, and culture of Barcelona. These city-specific market histories explore the peculiar spatial and regulatory boundaries of the marketplace over time, the role of gender and kinship in defining commercial relationships, the effects of industry and technology on food channels, and the promotion of markets as pillars of culinary tradition and dietary practices.[11]

Les Halles, the central food market of Paris, has been the focus of innumerable monographs, most recently by Christopher Mead. In *Making Modern Paris*, Mead places the rebuilding of the central market in the context of nineteenth-century debates about urban planning. The central government considered relocating the central market but opted instead to keep Les

Halles in place as a unified system of super blocks connected by covered streets. Erected between 1854 and 1874, its new design consisted of ten iron and glass pavilions devoted to specific food types and with flexible floor plans that enabled wholesalers and retailers to coexist under one roof.[12] Two essays on Les Halles in *Food and the City*, a Dumbarton Oaks symposium volume, tackle the complexities of the central food market in the French capital. Susan Taylor-Leduc (on the nineteenth century) and Meredith Ten-Hoor (on the post–World War II era) consider the central market in terms of the symbiotic relationship between city and countryside, the innovative marketing strategies of buyers and sellers, the complex channels of distribution that were imbedded in the urban fabric, and the biopolitics of state-sponsored food system planning.[13]

The notion that buildings and spaces for the wholesale trade are engines for urbanism, planning, and economic growth is the underlying premise of *Making Cities through Market Halls: Europe, 19th and 20th Centuries*, coedited by Manuel Guàrdia and José Luis Oyón. Contributing authors, writing from the perspective of market systems in their home cities in Spain, France, Italy, Germany, Austria, Great Britain, Russia, and Scandinavia, focus on major phases of food system planning over several centuries and the impact of certain building strategies on urbanism, food supply, and diet.[14] Food planning has had a long trajectory in the United States, but its history has been "hidden," as Domenic Vitiello and Catherine Brinkley persuasively argue, in part because planning historians have not explicitly analyzed it and nontraditional planning institutions and movements have guided most of its activities.[15] American planning historians have tackled the evolving functions, transportation systems, land use, and ideals of the city, but they fall short on an analysis of food provisioning and its physical presence and functional ties to downtown.[16]

Wholesalers and their role in the development of marketing and distribution channels are recognized figures in broad histories devoted to a single foodstuff such as bananas, eggs, meat, fish, or tomatoes. Food-specific narratives provide an opportunity to consider intermediaries as critical actors in the context of political, social, economic, and ecological change. They also enliven multiple disciplines ranging from agricultural and labor history, to history of business, technology, and the environment.[17] Even as some food-specific narratives get very specific, as Gabrielle Petrick has demonstrated with iceberg lettuce, we learn how industrial production, distribution, and taste contributed to the rise and decline of a mass-produced vegetable.[18] As food history scholarship embraces the interrelationship of production, consumption, and distribution, it taps into major threads in American history, making the world of intermediaries all the more relevant.[19]

This volume owes its inspiration to an established literature on the history of retailing and consumption. Using retailers as a point of departure, Susan V. Spellman, in *Cornering the Market*, gives agency to independent grocers in the late nineteenth and early twentieth centuries, whose innovative business models, organizational practices, and retail technologies fostered the rise of contemporary retailing. Susan Strasser, in *Satisfaction Guaranteed*, also offers a history of nascent systems of distribution, marketing, selling, promotion, and retailing, in the context of new products for a national market. In the case of food, manufacturers created mass markets by eliminating the wholesaler and in some cases marketing groceries under their own label. As Marc Levinson demonstrates in *The Great A&P*, the food retailing giant went further in circumventing the wholesalers by integrating vertically and purchasing direct from growers through the Atlantic Commission Company—its produce-wholesaling subsidiary. By 1930, A&P was the largest retailer in the world, with $2.9 billion in sales and the owner of nearly sixteen thousand stores. Tracey Deutsch, in *Building a Housewife's Paradise*, takes the evolution of the grocery store still further in her close examination of the roles that gender, business, class, and the state played in the iconic rise of the supermarket in postwar America life.[20] Historians working from a variety of perspectives have also introduced us to the retailing revolution through built-form as a manifestation of new business practices, strategies, and technologies. As the corner grocery store, self-service chain store, drive-in market, and supermarket permeated the built environment, so too did they affect the social geography and commercial landscape of the city.[21] As A. K. Sandoval-Strausz argues, despite the fact that these commercial structures are relatively recent arrivals on the landscape, they nonetheless contribute to vast and still-growing trends in capitalism and urbanization. In this book, I bring wholesale markets into this conversation.[22]

A common theme in retailing and consumption history is the universal quest to "avoid the middleman"—a mantra that has a life of its own and persists today as a business strategy or ideal. Yet, throughout their volatile history, independent wholesalers adapted to changes in their physical and economic environment. They also based their business strategies on new technologies and turning a profit while maintaining commercial ties. They understood that it was important to "stick together," a position that served them well when they faced a forced move from the city center. I take a close look at this sector of the food industry, the one most closely associated with the claim of “feeding the city.” While the retail sector remained under the eye of the Federal Trade Commission and the Department of Commerce, especially during the anti-chain movement in the 1930s, the USDA assumed responsibility for the wholesale sector by producing free market news reports, standardized plans for facilities, state support, recommendations for new market locations, and guidelines for new forms of ownership and organization. The USDA also brokered cooperative agreements between growers and shippers, urban renewal plans that altered existing food channels, and the design and operation of food industrial parks—an authority it still has today. My study traces the political and economic pressures that forced government oversight of the wholesale trade to move from the local to the state and federal level. Throughout its history, the wholesale produce market—as both a physical place and a sector of the food economy—has been tied to the well-being of the city and remains a matter of public interest.

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PART ONE

OPEN ENTRY

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CHAPTER ONE

Shelter for the Middleman

> A market house and a market system that were exactly adjusted to the wants of a city of 60,000 or 70,000, grow yearly more inadequate as the population swells to 130,000, 150,000, and to higher figures.
>
> —Horace Capron, *Report of the United States Commissioner of Agriculture* (1870)

In his annual report on the state of the union, Horace Capron, commissioner of the United States Department of Agriculture, articulated the physical and regulatory inadequacies that hindered large cities after a generation of experience with open entry in the food market. Capron addressed a familiar and persistent grievance of farmers and consumers, namely, that food passed through too many hands from farm to table—hands that took a disproportionate share of the farmers' profits and raised the prices that consumers paid for their necessities. Capron's report is remarkable in its recognition at the highest level of government of the economic power of intermediaries in the food supply chain, and it resonates with many of the themes presented in this book. Capron acknowledged the problems of a dispersed food landscape that followed when cities permitted wholesalers to operate under license in private shops. He alluded to the inability of existing market houses to accommodate new food supply chains, and he introduced the principles of price margins as a matter of public interest. Capron also wrote in terms of "market systems" that were dictated by law and custom—systems that could only be improved once they were understood. The unique character of a city's urban plan, geography, population, and growth guided these systems, as did new modes of transportation such as the railroad. In terms of the middlemen themselves, Capron recognized that their business had not yet crystallized "into permanent forms," making it difficult to classify their functions with any specificity or to regulate them in any standardized way. Nonetheless, he saw merit in reducing them in number, systematizing their business practices, and holding them accountable through more regulation, especially since their activities crossed state lines.

Using the authority of his position, Capron declared marketing to be an agricultural specialty separate from but equal in importance to agricultural production. He put the supply of fruits and vegetables on par with the meat supply in large cities and gave the same urgency to solving a glut on pears with the need to improve the transportation of live animals and dressed beef to market. In preparing his report, Capron's department sent circulars to city marketing experts across the country, asking them to provide copies of current fees, licenses, and ordinances that regulated farmers at city markets, as well as the prices obtained by middlemen and hucksters compared to what the farmer received. Although decades would pass before the United States Department of Agriculture institutionalized oversight of urban food marketing, Capron's report highlighted the negative consequences of open entry and heralded the rise of federal oversight of food systems planning.

Early Middlemen and Their Forms and Functions

The wholesale market was neither a clearly defined place nor a major factor in the food economy before 1850. Cities and towns in the colonial period and early republic managed the food supply with market laws that restricted the sale of perishables to the mandated public markets. The municipal monopoly guaranteed direct sales between the producer and the consumer, and cities kept intermediaries under scrutiny for any trade violations that interfered with a healthful, abundant, and affordable food supply open to all. Based on English and European common law, customs, and practices, municipal market laws were consistent throughout North America in the early stages of urban development, especially laws against the trio of offenses known as forestalling, regrating and engrossing. Forestalling, from the Old Saxon *fare*, to go, and *stall*, to hinder, referred to the act of trading goods privately before they reached the open market, buying in the market before the accustomed hour, or spreading false rumors regarding available supplies. Regrating, from the Old French *regrateor*, meaning peddler or huckster, was the act of buying goods in the market with the intent of resale in or near the market. Engrossing, the practice of hoarding in order to create artificial scarcity, was also a trade offense. Although enforcement was inconsistent, these laws held local government responsible for restraining or at least limiting economic conduct that manipulated food prices for private gain. The municipality held intermediaries in close check by limiting their numbers and economic strength in an effort to protect the producer–consumer relationship. Who, then, were the early middlemen subjected to forestalling laws, what functions did they perform, and where did they operate?[1]

Shopkeepers acted as middlemen for produce whenever they accepted crops from cash-deprived farmers in exchange for dry goods. Consider Francis Piatti, for example, the Richmond grocer who advertised a "general assortment of groceries" for sale "for CASH, or Country Produce" in an 1809 broadside. Piatti's store was "on the Main Street, at the corner of the Street leading to Coutts's Ferry, below the Market House." There, his customer-suppliers could stock up on everything from coffee, tea, spices, and liquor, to gunpowder, shot, bacon, and barreled fish in exchange for their unsold produce before heading back to their farms. Piatti then consigned the farm produce for cash to commission merchants. Grocers such as Piatti relied on proximity to the marketplace, since their business depended on a steady clientele of farmers who patronized their stores on market days not only as customers but also as suppliers of consigned produce.[2]

Other middlemen who handled perishables in the urban context were street vendors—also known as hucksters, hawkers, or peddlers—who sold provisions secondhand to consumers in the marketplaces, streets, and neighborhoods. The municipality privileged these ambulatory and relatively anonymous vendors by giving them licenses to sell certain processed foods or provisions produced by others in small quantities or sizes as defined by local laws. The street vendor fulfilled this municipal mandate by going to the ports and docks in the early morning hours to procure perishable goods that required quick turnover and careful handling. Milk enjoyed a long tradition of street vending and personal delivery by street vendors as did other products conducive to this form of intermediary trade. Seasonal fruits such as strawberries and melons—either too delicate or too bulky for the average farmer to market with efficiency—were popular products of the street vending trade, as were fish and seafood readily available in quantities too small for the average market stall retailer to handle.

Anyone in the business of loading, carting, and unloading essential goods was also an intermediary. The municipality regulated these public carriers and licensed them to handle goods in specific quantities, weights, and distances that were beyond the normal abilities of an individual farmer, grocer, or peddler. As such, they swore an oath to honor forestalling and engrossing laws lest they profit from patronage and loyalty to certain merchants at the expense of competition. In addition to firewood and hay, they handled bulk goods that entered the food supply—everything from fish, meat, and live animals, to beer, cider, sugar, flour, and potatoes—and they moved goods between steamboats and railroad depots to other parts of the city. Municipal regulations varied from place to place, but in general, local ordinances and licenses dictated carriage rates, limits on loads, types of vehicles and containers, business days and hours, and the direction or point-to-point movement of carriers within the city limits. The goals of such regulations were the same, namely, to prevent the cartage through the city of noxious products, such as offal, spoiled meat, and rotten vegetables; to prevent pilfering or damage of goods in transit; and to avoid disruption to everyday pedestrian and vehicular traffic.[3]

Middlemen with the greatest political and economic clout were wholesale merchants who operated from modest brick or wooden warehouses on the waterfront in large port cities, where the market, facilities, and labor already existed for the receipt and distribution of bulk goods. Most of their stock was nonperishable, such as rice, flour, and cured meat and fish, and their clients were typically shopkeepers, food processors such as bakers and brewers, and the military. The all-purpose merchant financed, insured, and transported goods without regard to or need for specialization but declined as a factor in the food economy by the mid-nineteenth century in favor of dealers who specialized in the mass-marketing and distribution of goods as commission merchants and other wholesalers. Nineteenth-century state legislators responded to this development by using licensing as a means to recognize and more broadly sanction this form of trade. In Maryland, the move began as early as 1832, when an act of the legislature permitted anyone to set up a shop or stand under license, as opposed to operating under corporation laws. Tennessee, Missouri, Pennsylvania, and California passed similar statutes around midcentury for licenses that distinguished wholesalers from merchants and retailers, indicative of their growing specialization, economic strength, and interstate activity in the handling of perishables. Alabama followed suit in 1868, when commission merchants joined a long list of businesses and occupations that could trade under state license.[4]

The commission merchant took advantage of economies of scale to meet the growing demand for perishable produce in large cities, and he avoided risk by selling on consignment instead of purchasing stock outright. This type of wholesaler was a powerful player in the food supply chain by the 1870s, when wholesalers had come to specialize in fresh fish and meat, including game, and followed later in milk, eggs, poultry, fruits, and vegetables. Fish and meat, as compared with most other agricultural products, were more susceptible to spoilage, their supply was unpredictable, and as individual goods, they were heterogeneous in nature. Consumer preference focused on the size, weight, and quality of the item rather than on price alone, leading to a specialization of purveyors. The desire on the part of consumers, retailers, and, later, restaurateurs to examine fish and meat, or to have their agents do so for them, was a driving force behind the development of large centralized markets that facilitated the matching of individual buyers with individual sellers.[5]

The early history of Fulton Market provides a useful account of the factors that led to a primary market (as both a trade and a physical place) for a dedicated line of perishable products that supplied the secondary markets of a major city. Shortly after an 1817 act of the state legislature authorized the Corporation of the City of New York to take possession of the land near Fulton Ferry, the city established a public market for general produce. The location attracted a rapidly growing wholesale trade for fish and oysters, owing to a deep basin, good municipal slip accommodations, and water that was reputedly unequaled in its purity owing to the rapidity of the current. Commercial fishers attracted to the market's natural advantages and physical amenities brought live salt- and freshwater fish from the coastal and inland waters in smacks—a type of fishing vessel fitted with a latticed-bottom well that kept the fish alive. Suppliers of salted fish from the Great Lakes sent thousands of barrels to Fulton Market after the Erie Canal opened in 1825. Railroads and steamboats contributed yet further to the New York City supply by delivering frozen fish from the upper lakes in the winter months.[6]

In 1847, as New York's wholesale fish and seafood trade proved critical to the local economy, the city invested in a new wooden shed at Fulton Market, on the bulkhead facing South Street, to accommodate more dealers. The shed ran the entire length from Beekman to Fulton streets, with eaves on the waterside to protect the fish barges (fig. 1.1). Thomas F. De Voe (1811–1892), the New York butcher and amateur historian, described a typical scene at Fulton Market: "Hours before daylight every morning of the week, may be found here fish-wagons, carts, and other vehicles, from the various public markets, meat-shops, and street peddlers, from this and the neighboring cities, towns, and villages, for their daily supplies; which part of the business is generally over by seven o'clock, A.M. Then large quantities of salt-water fish are packed in boxes, and sent to the interior cities and towns." Although De Voe did not use such terms, he was recounting the temporal rhythm, geographical reach, and customer base that characterized an emerging wholesale market and distribution center.[7]

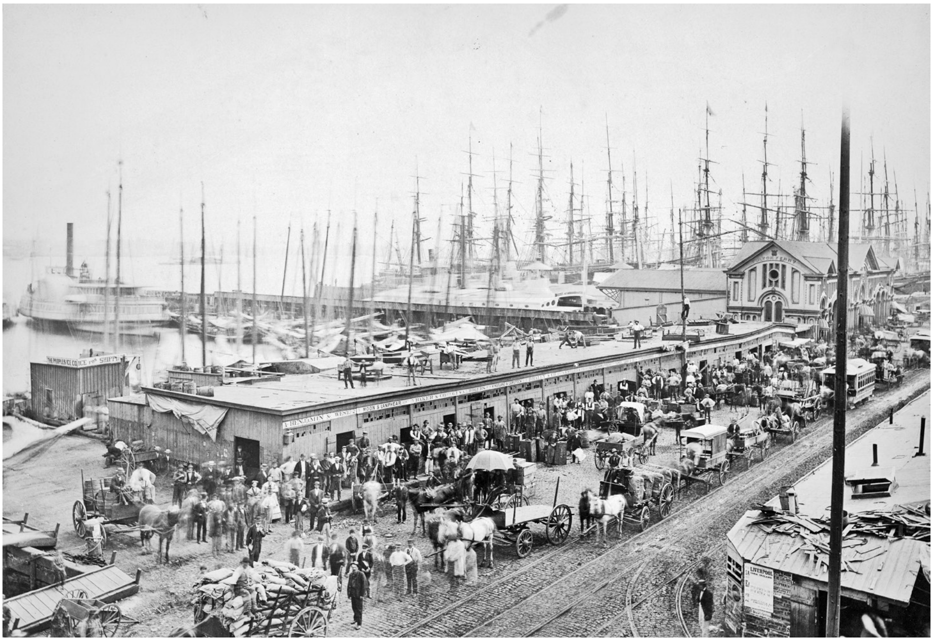

Figure 1.1. *Fulton Fish Market, New York City, ca. 1868*. Courtesy Mystic Seaport Museum.

The volume and differentiation of fish handled at Fulton Market was so great that the development of intermediaries and the industry they would create was inevitable. As supply outpaced household demand, a new class of wholesalers emerged to specialize in everything from packing and shipping goods to other cities, to filling orders for restaurants, hotels, boardinghouses, and ship galleys. Hundreds of species of edible, waterborne products, including freshwater and saltwater fish, shellfish, turtles, frogs, and eels, passed through their hands—the harvest from both distant waters and from the licensed fisheries along the city's numerous estuaries, ponds, and creeks. Differentiation of product and labor was nowhere more apparent than in the wholesale oyster trade, which handled four grades of oysters for sale in the shell. The highest-quality oysters sold as extras, followed by the box, culling, and bushel. Some wholesalers sold at retail, shucking oysters on demand or selling them to the household trade by the hundred, gallon, or quart, and large firms pickled them for domestic and foreign consumption.[8]

Demand for more participation in the booming food economy prompted the New York City commissioners to repeal the market laws in 1843 with a new ordinance that permitted licensed shops to operate outside of the mandated public markets. The lifting of spatial restrictions on the city's food suppliers thus strengthened the number of intermediaries who found opportunity in supplying the growing number of private shops. Market butchers at Fulton Market and Washington Market, therefore, followed their counterparts in the fish trade by engaging as wholesalers. They not only supplied the smaller market stalls and shops but also filled large orders for steamers, packets, and other vessels, as well as for hotels, restaurants, and boardinghouses. Describing the city's beef trade in 1871, a writer for the *New York Times* declared that "twenty years ago the present method of selling beef, through middle men, who receive a commission on their sales was inaugurated, and now ninety-nine one hundredths of all the beef eaten in New-York passes through their hands."[9]

Open entry also reoriented Faneuil Hall Market in Boston from a retail to a wholesale facility, as the city repurposed existing market infrastructure to accommodate the growing number of intermediaries. In 1825, when the city laid the cornerstone, its population of 58,277 was concentrated mainly within a one-mile radius of the market. Greengrocers at Faneuil Hall Market sourced their produce directly from farmers from the surrounding countryside, and meat dealers received their supply from within the state of Massachusetts or at the farthest from Vermont or New Jersey. As the population increased so too did the character of the market business. By 1850, when the population reached 388,276, many merchants shifted their trade from retail to wholesale, in response to a shift from household to commercial and institutional customers. Between 1850 and 1865, the number of grocery stores grew from 125 to 739, and only a fraction of Boston's household shoppers depended on Faneuil Hall Market for their daily groceries. Local officials slackened their traditional responsibility to keep wholesalers out of the market house in order to enjoy the added revenue from their stalls. By the early 1860s, aldermen looked the other way if a single wholesale dealer rented two or more stalls in Faneuil Hall Market—an action that would have violated earlier market laws that regulated the equitable distribution of commercial space by limiting one dealer to one stall.[10]

Another sign that Faneuil Hall Market was in transition from a retail to wholesale market were new tenants such as the Ames Plow Company, the sellers of agricultural hardware, who moved into the market's upper level in 1862. Cities typically reserved the upper level of market houses as places for public assembly and the use of armories and militias. Faneuil Hall Market, however, was now prime commercial real estate for the business partnership of Oakes Ames—the manufacturer, politician, and railroad capitalist—and his brother, Oliver Ames Jr. Their customer base for shovels, plows, and other agricultural equipment was not only the farmer who came to the Boston market but also the wholesaler who broke bulk, packaged, or processed food on site in the market stores and cellars. Ames supplied these dealers with food processing equipment such as corn shellers, vegetable cutters, cider mills, butter churns, meat cutters, sausage stuffers, and handcarts for moving goods.[11] Ames stood to profit from the visibility and location, and the city resigned its long-standing practice of curbing signage on public buildings by permitting the company to hang a colossal sign on the market's exterior (fig. 1.2). Joining Ames as tenants in the market were the Boston Produce Exchange and the Commercial Exchange (later joined to become the Chamber of Commerce), which rented newly divided rooms in the rotunda under the dome. Municipal officials recognized the need for keeping a wholesale market under its jurisdiction and in doing so declined several offers from wholesale firms who wanted to buy the building. In short, Faneuil Hall Market, originally a retail market house for the household trade, metamorphosed within a few decades to become an industry headquarters and major food depot for New England. The city willingly clung to its role as steward of the food supply by maintaining ownership of the property and responsibility for the region's lucrative wholesale trade, whose total annual sales at Faneuil Hall Market had reached $20 million by 1880.[12]

State and local officials continued to encourage intermediaries in ways that were favorable to the development and enlargement of their trade and in defiance of the municipal monopoly that historically restricted them. In 1864, the Supreme Court of Illinois reversed a decision of the City Court of Alton that aimed to protect the city's right to forbid forestalling and the sale of produce outside of its public markets. The case began when the lower court ruled that the common council of Alton had the authority to prohibit Calvin D. Caldwell, a "dealer in family groceries," from selling vegetables outside of the public market limits. In an interesting argument before the Illinois Supreme Court, Caldwell's defense argued that the city's public health would be compromised if he and others could not move perishable merchandise that otherwise would be left to rot after market hours. In other words, Caldwell's role as a middleman—someone who bought produce in the public markets and then sold it again elsewhere within the city limits—was considered to be an act consistent with the common good. Supreme Court Justice

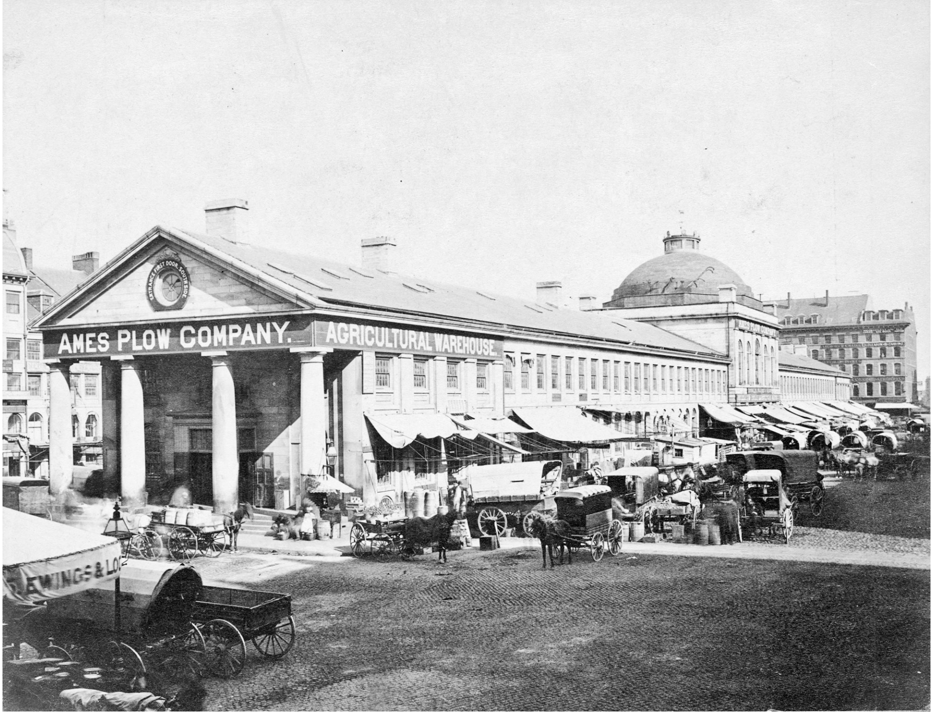

Figure 1.2. *Faneuil Hall Market, Boston, 1880.* Boston Pictorial Archive, Boston Public Library.

Breese was convinced and reversed the judgment of the lower court, arguing that the city's power to establish, build, and regulate public markets "cannot be made to embrace the whole city," and that any effort to do so would be "in restraint of trade, unreasonable and unjust."[13]

By 1860, certain cities and regions had developed major markets that signaled the emergence of a national network for the wholesale trade in food. In the East were New York, Boston, Philadelphia, and Baltimore; Chicago, St. Louis, and Cincinnati in the Midwest; and New Orleans in the South. New England wholesalers alone bartered with those in the South over $60 million worth of manufactured goods, fish, molasses, and other products in exchange for cotton, flour, tobacco, and other dry goods. Chicago's wholesale grocery trade was $8.2 million and accounted for 25 percent of the city's total wholesale business, and the Cincinnati city directory of 1860 listed ninety-seven wholesale grocers. Louisville was another major wholesale center after the Louisville and Nashville Railroad opened in 1859, and by 1860 the city had thirty-nine houses engaged in the wholesale grocery trade. In addition to dry goods, wholesale grocers handled perishable stock that might include bananas and other tropical fruits originating as cargo from the Atlantic trade. They might also carry domestic fruits and vegetables that were bulky and seasonal, such as melons, potatoes, and onions. Some dealers handled live and dressed poultry and sold meat and fish cured in salt or brine. Dry goods, however, still dominated the stock of a typical wholesale grocer, since retail stall merchants and storeowners procured their supply of domestic fruits, vegetables, meat, and fish direct from producers.[14]

As the wholesale trade expanded within and beyond the city limits, so too did it expand across state lines. Urbanism, an expanded railroad network, and growth in manufacturing spawned secondary wholesale centers, such as Kansas City, Minneapolis, and St. Paul, where dealers handled an interstate traffic in fresh produce. Some wholesalers specialized in certain lines of products, such as southern produce, Chicago dressed beef, or California fruit purchased direct from the processor, importer, or producer. Others might specialize in promoting their own grocery brands, and some dealers—even if they held licenses as wholesalers—functioned as retailers during slack periods when they were not selling to their regional buyers.[15]

Regardless of specialty, the early wholesalers who traded across state lines were self-regulating in an effort to establish and maintain their reputation for honest deals. Exemplary was Raymond & Ward, commission merchants at 177 South Water Street in Chicago, who provided clients with a printed table of weights in 1854. The table recognized the legal weight differences in a bushel, depending on the state. For example, the laws of Massachusetts and Rhode Island recognized a bushel of onions as weighing fifty pounds, whereas the legal weight of a bushel in New York, Indiana, and Iowa was fifty-seven pounds. The table also listed similar differences in the legal weight of a bushel from state to state for other food articles, such as grains, dried fruits, beans, and potatoes. The weight differences mattered when Raymond & Ward filled or received orders across state lines.[16]

Commission merchants depended on a steady, trusting clientele if they intended to stay in business, and adherence to honest weights and measure was only part of a successful venture. They relied on suppliers and packers to mark carefully their goods in case their shipments got lost in transit. Chicago merchant John Radcliffe noted in his advertisement in the 1855 city directory to “Mark Bags Plain, or Expect to Lose Them.” Goods lost in transit to the commission merchant must have been a common occurrence, leading some firms to specialize as “lost bag agents,” such as Osborn and Warrington, whose business was located at 108 Randolph Street, right in the heart of the Chicago produce district.[17]

The firm of Cook, Hayward & Company of New York disclosed its commission fees and provided references in its 1863 circular in an effort to boast the firm’s standards and integrity. The circular offered detailed directions for dressing and packing produce for “the benefit of our friends,” even offering their consignors “Stencil Plates” for marking containers. For packing poultry, “boxes containing 150 to 200 lbs. are most desirable. Larger boxes are inconvenient and apt to get injured. Mark the contents, gross and tare on the cover. Direct plainly and neatly and put initials of your own name on the cases. Put ‘Bill’ in and mark it; also send bill by mail. Have a uniform mark—neatness and cleanliness are indispensable. All perishable articles should be shipped by Express.”[18] For eggs, the firm advised suppliers to “be very particular to have the count right” when packing them in barrels. “A reputation for accuracy of count, weight, tare, &c. is very valuable. False marks only discredit a brand.” For butter, “nothing pleases Commission Merchants more than to receive a strictly fine dairy of Butter—sweet, yellow and rosy.—It sells readily at a satisfactory price, and every person is pleased from producer to consumer.” In addition, for apples, the packer should sort them for uniform size and quality, then “pack them in clean new barrels, flour size, flat hoops.” Apples were to be layered stems down and the barrel shaken well before securing the head. Packers should avoid using large or numerous nails when closing the barrel, so receivers were less likely to damage the goods when opened. Finally, packers should “mark plainly on the head that is faced, the variety contained.”

Commission merchants and shippers also communicated with their buyers and suppliers on matters pertaining to the current market for specific goods. Knowledge of supply and demand was just as important as proper packing and handling, for commission merchants and shippers could sustain losses if perishable goods headed to cities where the market was weak. Market news reports appeared in daily newspapers and special circulars such as the *Commission Merchant’s Daily Report of Baltimore*—a circular “devoted to the interest of Shippers of Produce and Commission Merchants of this City.” The report of March 8, 1887, for example, claimed that its publishers would “not be controlled by speculators, dealers in futures or dictated by any organization.” All quotations were for wholesale lots only and represented the actual prices obtained by S. M. Lyell & Co., commission merchants. Several choice words and phrases that accompanied the price quotes introduced Lyell as merchants who could be trusted to handle one’s merchandise and to command the best price. “Established in 1866,” the firm had been in business for twenty-one years. The address, “No. 4 E. Camden Street,” highlighted the firm’s prestigious location next to Camden Station, where the B&O Railroad maintained the city’s preeminent produce yard. Shippers wishing to do business with Lyell would want to make note on a given day that “cherries remain quiet” and the market for eggs “was less active and unsteady.” Sweet potatoes, conversely, were in “good demand for choice only,” but sweet potatoes whose quality was “common and fair” were “neglected.” The messages from such an established and aspiring commission merchant were clear. The trade would only survive if honesty, integrity, standards, and attention to the market became shared values among the producer, packer, and dealer—all of whom were learning along the way, by trial and error.[19]

Distribution: A New Factor in the American Economy

The widening distance between producer and consumer, however, was a great concern to the nation’s still young Agriculture Department, the new federal agency established in 1862. In the aftermath of the Civil War, the department was keen to develop a national traffic in fresh food that commanded the cooperation of agriculture, industry, and local government. Horace Capron (1805–1885), United States commissioner of agriculture from 1867 to 1871, described this agenda in his 1870 annual report. Based on the results of the department’s nationwide survey, he argued that the country would have to overcome obstacles inherent in current marketing systems before cities could make improvements.[20]

The survey results concluded that a wide margin existed between the price of fruits, vegetables, grains, and meats sold direct in small cities and towns versus the rates at which the same items sold to consumers in cities whose population was more than 100,000. This situation, Capron opined, was “suggestive of extortionate combinations and oppressive regulations” in large cities, especially the manufacturing cities. These abuses were the result of greed inherent in the middleman and huckster—terms he used in a derogatory manner. The majority were of “foreign birth,” which would "itself account for many of the abuses complained of." Not only did they engage in unethical trade practices, according to the survey results, but they also used their advantage as voters to influence municipal regulations that burdened the farmer.

The state of marketing varied from city to city, as did the attitude toward middlemen. As the San Francisco correspondent stated in his response to the federal survey, "middlemen are and always will be indispensable, and they must be paid." Since San Francisco was on the end of a peninsula, much of its land was unfit for cultivation. Farmers from the fertile plain of Alameda, on the eastern side of the bay, preferred to sell their produce to middlemen rather than truck their wagon loads by ferry across the bay to the city. Thus, nearly all the fruit, dairy, produce, game, poultry, and vegetables sold in San Francisco passed through the hands of commission merchants, who charged 5 to 8 percent. The correspondent concluded that "the only improvement must come from a reduction in the number of middlemen, systematizing their business, and holding them to account."

The report from the Pacific coast clarified what Capron termed the "mischiefs of a false system of distribution," referring to ten thousand bushels of pears that had rotted in the orchards of Santa Clara for lack of a fair buyer. Growers threw the pears to the pigs, while the price of a pear at a grocery store in San Francisco, fifty miles away, was an exorbitant five cents. Similar abuses occurred in Mobile, Alabama—a city likewise built on a peninsula, with wide marshes and barrens separating it from productive lands. Capron received complaints of the "unrighteous profits exacted of the consumer by middlemen and hucksters." In Mobile, as well as in Charleston, South Carolina, hucksters reportedly charged 100 to 200 percent beyond the sum paid the producer, whereas in Norfolk, Virginia, "the advance is quite reasonable, being on an average not over 20 per cent." Hucksters in Buffalo made about a 25 percent profit on produce bought from farmers, but "the correspondent thinks the middlemen a useful class, because they enable the farmer to sell out early and get back to his farm to work."

Capron argued that large cities should take control of the problem by eliminating their oppressive licenses, fees, parking restrictions, and limited market days and hours—regulations that discouraged the farmer from coming into the city. Ordinances should be "so framed as to promote this direct traffic rather than discourage farmers and throw the food supplies into the hands of middlemen and hucksters." He recognized the progress that meat merchants had made in the long-distance transportation of live animals direct to municipal slaughterhouses and the marketing of dressed beef in city markets, but he was more concerned that local authorities take equal measures to improve the movement and marketing of fresh fruits and vegetables.

Capron concluded his 1870 annual report with the message that "marketing thus grows into a special trade, requiring special confidences with railroad men and a knowledge of cities that the working farmer has neither the time nor the tact to acquire." While it would be decades before the federal government perfected this expertise under the auspices of the United States Department of Agriculture, the middlemen developed their trade freely in ways that generated growth and innovation in food marketing and distribution. An entrepreneurial drive was most apparent among shippers of perishable produce over long-distance routes. Although they bore all risks for damages that might occur in transit, they still could profit from supplying distant markets with produce that was otherwise not available locally or in season (fig. 1.3).[21]

The first refrigerator line intended strictly for fruits and other produce ran over the Michigan Central in 1886 with equipment owned by the Detroit Refrigerator Car Company. The Armour Packing Company, which had specialized theretofore in refrigerator equipment for dressed beef, entered the fruit transportation field around 1890 and quickly dominated the California

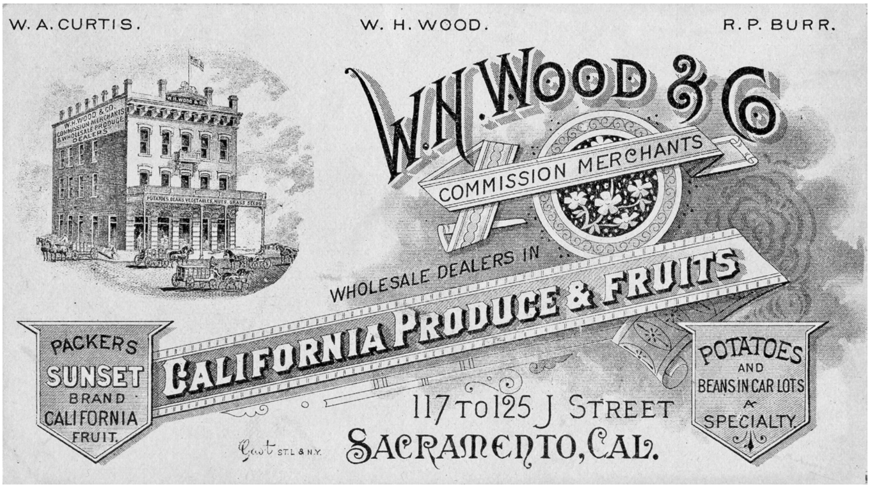
W. A. CURTIS.
W. H. WOOD.
R. P. BURR.
W. H. WOOD & CO.
COMMISSION MERCHANTS
WHOLESALE DEALERS IN
CALIFORNIA PRODUCE & FRUITS
PACKERS
SUNSET
BRAND
CALIFORNIA
FRUIT.
POTATOES
AND
BEANS IN CAR LOTS
A
SPECIALTY.
117 TO 125 J STREET
SACRAMENTO, CAL.
Gast ST. L & N.Y.

Figure 1.3. *W. H. Wood & Co., advertisement card, ca. 1880.* Center for Sacramento History, Bill Stritzel Collection, 1982/047/005.

and South Atlantic trade. The combination of improved refrigerated rail service and the growth of urban markets lured California farmers into raising market fruits and vegetables instead of cash crops such as wheat. By the 1890s, the national market for California produce had transformed many of the state's agricultural towns, such as Watsonville. Operating in the rich and fertile Pajaro Valley, the Watsonville farmers and fruit packing houses sold strawberries, apples, and other fruits and vegetables for the California market, and shipped them by rail and sea to San Francisco and beyond.[22]

Transportation by water had been the principal means of moving produce from the Atlantic seaboard regions of the South to urban markets in the North until the 1880s, when long-haul railroad traffic in fruits and vegetables began to dominate. The southern railroads, having recognized truck farming as an additional source of revenue, overcame several technical and organization problems by converting to standard gauge and establishing major connections. The extended rail system and the profitability of truck farming in the South combined to elevate the status of fruits and vegetables near to that of King Cotton. In 1885, shippers of southern produce sent berries and vegetables from Norfolk, Virginia, by way of Cape Charles on the Virginia eastern shore. They also handled perishable freight service from Charleston, South Carolina, beginning in 1888—the same year that Florida oranges made their way to the New York market—and Georgia peaches and New Orleans vegetables were on the move by 1889. Likewise, agents for the Philadelphia, Baltimore and Washington Railroad, a component of the Pennsylvania Railroad, encouraged growers in the Delmarva Peninsula to ship watermelons and other produce in season to big city markets (fig. 1.4).[23]

Wholesalers also built their reputation on express companies that filled the important niche between the small package service of the United States mail and the bulky freight of the railroad. Wells Fargo agents moved produce early in its history, expressing cabbage, onions, and other vegetables by rail between Sacramento and Folsom, California, beginning in 1856. Shipments in Southern California began in 1871, and by 1882 local producers used Wells Fargo to send three tons of fruit and vegetables daily to Arizona, New Mexico, and Texas via the Southern Pacific Railroad. Wells Fargo handled more than five thousand tons annually by 1883, and its involvement and geographic range in the business of produce freight blossomed further in 1898, when it introduced its own refrigerated cars—a fleet that grew to one hundred cars within the next fifteen years. Similarly, the American Express Company in New York expanded its operations in the early 1900s by introducing electric

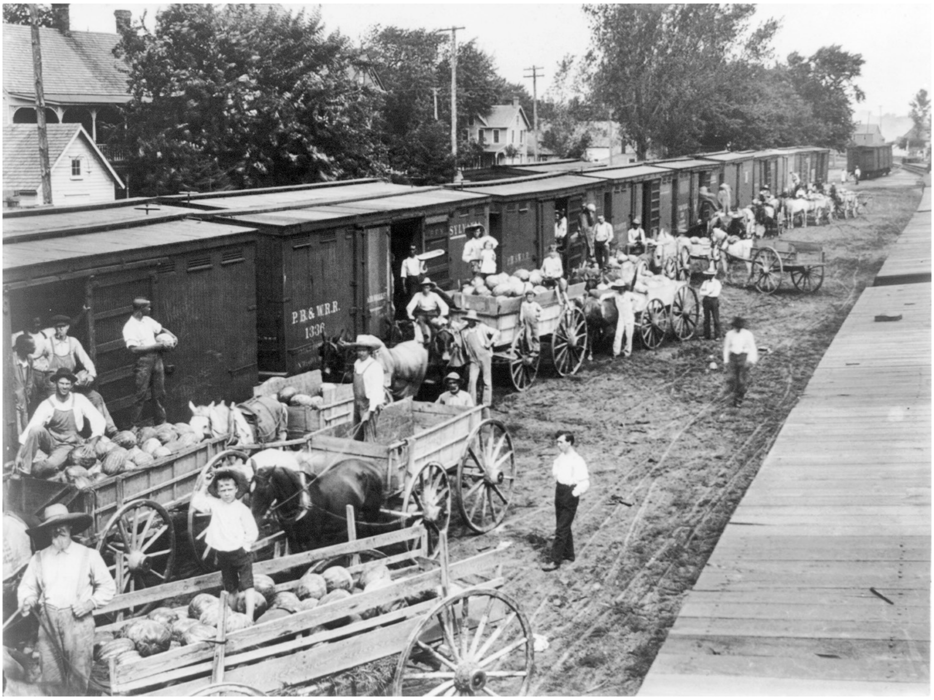

Figure 1.4. *Watermelon Season in Laurel, Del.: Waiting for a Chance to Reach the Proper Car, 1905.* Library of Congress, Prints and Photographs Division, LC-USZ62-24908.

motor trucks for produce deliveries from the rail yards to their final destination.[24] In 1892, when the Philadelphia and Reading Railroad built a market underneath the sheds of its new terminal in Philadelphia, the Reading Terminal Market quickly developed an extensive wholesale business with restaurants, hotels, and other institutions, shipping orders by rail all over the country. By 1900, the Reading Company ran a parcel post business known as the US Express Parcel Company. Seventy-five percent of its business originated at Reading Terminal Market, whose merchants shipped more than one thousand market baskets per week throughout Philadelphia and the region.[25]

The private rail carriers of refrigerated freight were prime targets of anti-monopolists in the late nineteenth century, including Josiah Quincy Jr. (1802–1882), the Boston politician and arch critic of the railroad. Quincy supported state ownership and regulation of the railroads in order to break up their quasi-monopoly on food transportation. In his 1869 address before the Boston Social Science Association, Quincy spoke out in support of cheap food for city workers who were otherwise at the mercy of the railroads and their unfair freight rates for moving provisions. The principal source of high food prices in Boston was allegedly Faneuil Hall Market—the very market house whose construction Quincy's father had overseen as mayor of Boston in the 1820s. According to a citizens' petition for a formal investigation of dealings at Faneuil Hall, the railroads manipulated freight rates and gave discounted rates to well-connected shippers and dealers, in violation of equity and rules of the market. If true, such discriminatory practices amounted to the railroads levying a private tax on farm produce. Boston's Committee on Free Markets, however, issued a final report on the allegations in 1870, in which it blamed high food prices on the city's retailers. Thus, the wholesalers at Faneuil Hall Market survived open entry by a narrow margin. While they enjoyed a monopoly of location at Faneuil Hall Market, this advantage was only temporary. In the decades to follow, the railroads built competing freight stations for perishable produce, not only in Boston but in other large cities. The wholesale produce terminals built by the railroads became new targets of market reform and regulation in the twentieth century, especially as they denied access to long-distance truckers of farm produce—a move that contributed to new shelter for the middlemen.[26]

One thing was certain with the rise of the middlemen. On the eve of the twentieth century, municipal ordinances against forestalling the public markets were virtually obsolete or ignored. The farmer was free to sell his goods to whomever would buy them, and the market stall merchant and grocer were free to buy their provisions from any source. Thus, the concept of wholesaling—to buy and sell again—had lost its negative reputation as a form of trade that could compromise the public good. In fact, the table had turned. When the City of Erie, Pennsylvania, made a last-ditch effort to adopt a forestalling ordinance in 1908, its action against an offender was reversed by the higher court in *Central Market Company v. Erie*, 44 Pa. Superior Ct 183 (1910). Joining the market company as plaintiffs was a farmer who leased a stall in the market house and one of his customers—a retail grocer who regularly purchased his store merchandise there. The appellate court argued that although the city had the right to police the market house with respect to matters of public health and safety and upholding the peace, it could find no justification for enforcing the "drastic" forestalling ordinance still on the city books. How else would farmers provision a market stall, the court asked, if they could not sell their goods in the market with “every reason to expect and believe they will be sold again?” Moreover, in support of the retail grocer, was he not providing a public service to his patrons by making the trip himself to the market to provision his neighborhood store with fresh farm produce? Indeed, the ancient forestalling laws—“oppressive, unnecessary and unreasonable” in the eyes of the modern court—had come to their end.[27]

CHAPTER TWO

The Produce District

Design by Improvisation

> In Europe the cities themselves have provided housing facilities for the wholesale trade, in the shape of great market halls, whereas in the United States, this matter has been left principally to private initiative with the result that wholesalers are commonly housed in separate, privately owned buildings located in close proximity to each other.
>
> —Louis Dwight Harvell Weld, *The Marketing of Farm Products* (1916)

The quintessential produce district came of age in the late nineteenth century and conjures images of a busy streetscape lined with mixed-use buildings devoted to the food trades. Monumental warehouses, market buildings, cold storage, icehouses, freight depots, food processing plants, and multistory packinghouses stand amid modest structures such as stables, feed stores, hotels, and eating establishments. This general impression owes in part to the fact that many produce districts still survive, physically at least, as historic districts designed to commemorate the former glory of their commercial activity.[1] Building stock within the produce district varied in terms of architectural style and function, and property owners or their tenants modified structures over time depending on use, changing commercial practices, or technological improvements in food storage, refrigeration, and modes of transportation. Nonetheless, the lack of visual and physical cohesion in the produce district was representative of its improvisational and uncoordinated development—a factor that agricultural economists and food systems planners in the coming decades would consider key to its subsequent demise.

Throughout open entry in the wholesale trade, the development of the produce district varied from city to city but was the result of a common strategy for meeting the spatial needs of dealers and their buyers. Political and economic forces over the course of the nineteenth century—urbanism, new markets for domestic goods, agricultural surpluses, improved communication and transportation networks, and a liberal political economy—forced municipalities to weaken their restrictions on intermediaries who handled perishable food. As such, wholesalers concentrated their businesses in the urban core, where the produce district evolved into a defining feature of the urban landscape. Whereas municipalities had been responsible for providing space for the retail trade, they were ill-prepared to deal with the explosive wholesale trade. With limited space for dealers, local officials yielded to real estate developers, private market and cold storage companies, and the railroads to satisfy their growing demand for commercial space. Some wholesalers operated in any number of makeshift environments, such as stalls, stores, or cellars in a market house; the ground floor of a building in a warehouse district; a carlot market in a railroad yard; or on levies and docks at the waterfront. Others occupied more stately structures located on prominent streets—typically speculative buildings designed for general commercial purposes.

Ultimately, these environments were laboratories for identifying defects in location, shop layout, warehousing, cold storage, food in transit, and merchandising on the eve of the twentieth century, when experts in government and industry began to consider ways to rationalize the wholesale food distribution system. Until then, merchants and suppliers may not have had a distinct building or place to call home, but they shared a common identity and sense of place. The produce district was the breeding ground for the trade. No one needed a sign or map to find it, for while it lacked definitive walls and boundaries a complex web of social and economic relationships held it together. No matter how seemingly chaotic, it was an integral part of public life in the city—a position that building owners, tenant-merchants, food suppliers, and food buyers were determined to keep.

The Municipal Farmers' Market

In 1860, Solon Robinson (1803–1880), a writer and advocate for agricultural improvement, encouraged New York City officials to consider establishing a municipal farmers' market, making his arguments in *How to Live: Saving and Wasting, or Domestic Economy Illustrated*. According to Robinson, wage earners in New York were in the hands of the butcher, baker, and grocer, who passed on an average 33 percent surcharge on groceries that had been handled by middlemen. Robinson blamed city government for failing to provide adequate parking for farmers, arguing that, "under the present market regulations, all the country wagons are huddled into the cramped space around Washington Market, where none but stout men, or a class of market bullies can get to them." Even though retailers and a few brave household shoppers could buy direct from a farmer parked outside of the city's largest public market, he or she was no match for the aggressive dealers and commission merchants who could buy the entire wagonload before sunrise. With fresh produce in demand by consumers, grocers, food processors, and institutions buying in bulk, the need for a central receiving point open and accessible to all kinds of buyers was critical. Robinson proposed the establishment of a dedicated public marketplace for country wagons, where farmers could sell to retailers and household consumers from sunrise until ten o'clock and afterward sell their remaining produce to wholesalers.[2]

Robinson's wish became a reality in 1879, when the city established Gansevoort Market—a farmers' market on an open square bounded by West, Little West Twelfth, Washington, and Gansevoort streets. The site was the former freight yard of the Hudson River Railroad and more recently had served as streetcar storage for the Bleecker Street Railway Company. The city was motivated to establish the market in order to relieve downtown traffic of the many farmers who crowded the streets around Washington Market. Legislation de facto restricted Gansevoort Market to farmers and gardeners of products they themselves had grown, and the majority of producers came from a radius of forty miles, mostly from Kings and Queens Counties—home to the nation's most intensive agricultural land. Describing the market in 1883, the *New York Times* reported that the sellers, as a rule, were farmers and small produce speculators from Long Island, while the majority of the buyers were retailers with shops or market stalls.[3]

The establishment of a municipal farmers' market was one way in which a city kept a hand on the urban food supply without major investment in buildings and infrastructure. The late nineteenth-century farmers' market bore little resemblance in terms of scale and operation to those of today. It was a giant municipal plaza or parking lot for farmers' wagons, where local ordinances aimed to restrict access to producers only—farmers who sold at retail up to a certain hour and then wholesale if they had any stock remaining. The municipal lot for farmers accommodated parked wagons and consolidated the delivery of country produce and raw goods at a single location. Public grounds were immediate and logical venues, since cities already had a precedent for establishing and regulating public space for the sale of nonperishable items. The municipality managed public squares, for example, as highly flexible spaces owing to the absence of permanent furniture, buildings, or fixtures, and they permitted marketing in public squares that could adapt to changing product offerings depending on the season. In addition to local produce, a single public square over the course of its lifetime could serve as a market for dealers of livestock, hay, straw, fodder, manure, seeds and grain; construction materials such as oyster shells, lumber, marble, lime, and bricks; charcoal and wood for fuel; and other bulk commodities such as cotton.

The municipal farmers' market was a popular urban amenity throughout the last quarter of the nineteenth century, and not just in New York City, for it created a major food supply depot without necessitating the cost of an enclosed building. To illustrate, Wilmington, Delaware, passed a local ordinance to reserve space for a municipal farmers' market on King Street in 1885. New Jersey farmers could sell on the north side of Fourth Street, between King and Walnut, on Tuesdays, Wednesdays, Fridays, and Saturdays. During the season, berry and melon farmers could sell there daily except on Sundays, and hucksters (vendors who sold the produce of others) could sell domestic fruits and vegetables daily except on Sundays on the south side, as well as on the north side of Fourth between Jefferson and Monroe. Dealers of Delaware peaches could sell in season at the other municipal farmers' market on Fourth Street between King and Orange Streets, excluding the Market Street block. Farmers by the hundreds crowded the streets on market days, when they backed their wagons up to the curb, left their horses at nearby livery stables, and raised the wagon shafts so that they would not project into the street. After the closing of the market, municipal services cleared the streets of vegetal debris and horse manure.[4] The farmers' market was an attraction for the wholesalers who established shops along King Street for year-round sales. King Street had thirty-two produce stores in 1880 and one hundred stores by 1900. Dealers specialized in general groceries, dairy products, baked goods, fish, meat, fruit, coffee, tea, spices, oysters, and confectionery. The district also housed an ice cream dealer, candy manufacturer, two flour and feed merchants, and seven wholesale commission produce merchants. The railroad made it possible for storekeepers and merchants to maintain contact directly with growers and producers for the stock needed to sustain a store or shop open year-round. Wilmington residents no longer waited for produce in season to reach the public markets, since fruits and vegetables from Florida began to arrive in February, and from other areas as they were available.[5]

The outcome of a public street or lot for farmers' wagons was essentially the same from city to city. Namely, a public-private partnership emerged in which the city, by guaranteeing a public space for the sale of regional produce, created the anchor for settlement and concentration of intermediaries in the food trades. The daily movement of perishable products, especially in the early morning hours, made concentration imperative, as streets and blocks gave way entirely to the food trades. Following the pattern of development in other commercial districts (for finance, retail activities, and entertainment), stores in the produce district spread in a linear fashion, expanding in contiguous rows of buildings into the side streets and parallel arteries, and consuming adjacent land rather than sharing it with extensive residential development.[6] Dealers who earlier may have occupied storage houses and open-air wooden structures near docks and waterways moved to more substantial brick and iron structures designed for permanency and with a style befitting an established commercial district. Small and moderate-sized dealers occupied two-story sectional market buildings usually as tenants, and large firms rented or built their own store-and-loft buildings, which were characteristically large and ornate. They housed dealers with national reputations or aspirations—dealers engaged in the emerging business of food packaging and processing, or those who marketed their own brand of groceries.

The Central Market

The increase in intermediaries, fueled in part by efficiencies in rail transport, the weakening of the laws that had once restricted them, and the establishment of large public lots for farmers' wagons, still begged the question of how best to shelter the middlemen engaged in the marketing and distribution of perishables. In 1871, Xavier Willard, president of the New York Dairymen's Association, tackled the subject in the annual address to his fellow dairymen, with respect to the traffic in cheese, butter, and milk. Willard argued that an "organized system of marketing is not only a benefit to the producer but to the produce dealer. When goods are scattered over the country it requires immense labor on the part of dealers to hunt up and get their supplies together." He believed that it was "right and proper that dealers be paid liberally for their services, for the risk of their capital, and for their skill in handling produce."[7] According to Willard, the real task was not to restrict dealers in perishables but to thwart their dislocation and dispersion. Toward this end, "if the producer and dealer agree to meet on a certain day at some convenient market-point, a large amount of goods can be examined in a brief time and at minimal expense." He advocated a new kind of market—the *central market*—new, that is, for the United States but well established in the large cities of Europe.

Willard was versed in the economic arguments for central markets that circulated in Europe, where improved and coordinated transportation systems, including canals, roads, and railroads, made it possible to bring large quantities of perishable goods to a single location. By creating one, primary market as a receiving and shipping point, a large city could better guarantee supply and price stabilization for wholesale dealers and their buyers in addition to rationalizing the movement of goods within the city. The primary market also supplied the secondary markets in said city as well as the primary markets in small neighboring cities and towns. Retail shop owners benefited from buying stock for their stores from a single location (what today is called "one-stop shopping"), and the central market attracted working-class families looking for variety and quality at wholesale prices.

Politics also played a role in the popularity of central markets in the second half of the nineteenth century, when many European nations shared a concern that conflicts over the food supply might threaten the public order. The high cost of living was a source of widespread discontent and a central theme of riots, strikes, and worker protests. Moreover, the growth of armies, civilian employees, and national and provincial capitals fueled a demand for food services and supplies. European nations considered government-controlled central markets to be essential in maintaining regulatory and physical control of the food supply—an important element in the state-making process. Central markets also appealed to local officials in large urban centers, where crowded living conditions, polluted air and water, and an overtaxed infrastructure of roadways and sewers were particularly apparent in and around the marketplaces. As a potential breeding ground for disease and social discontent, food marketing worked well if corralled into a single, central place that facilitated regulatory and administrative oversight.[8]

The establishment of central markets in Europe at midcentury required significant responses to current legal, administrative, spatial, and architectural practices that were imbedded in the city's past. In an effort to more closely regulate and contain the food supply in large cities, the English Parliament expanded broad municipal authority over markets with passage of the Municipal Reform Act of 1835 and the Local Government Act of 1858. The transfer of manorial rights over markets to the municipalities, coupled with the 1844 repeal of the early English statutes against forestalling, regrating, and engrossing, allowed midcentury city officials to carry out significant urban spatial rearrangements, including the closure of open-air markets in favor of new central market halls. Municipalities in England also made the legal and administrative changes required to collect stall rent—instead of market tolls—as a new source of revenue.[9]

The Central Markets in Paris, Les Halles Centrales, epitomized the key principles of a central market in built form. Constructed between 1854 and 1874 according to the designs of Victor Baltard and Félix-Emmanuel Callet, the unified series of cast-iron and glass pavilions, streets, and walkways accommodated all of the major food categories, as well as the various types of trade—sale by retail, wholesale, and auction. The markets preserved the historical patterns of commerce and social relationships in the quarter while promoting a modern food provisioning system that improved traffic patterns, facilitated policing of the market, and linked city dealers to the municipal livestock market and slaughterhouses at La Villette. The handling of perishable produce on a large scale, at a single location, generated an almost insurmountable supply of organic waste that market gardeners recycled back into their gardens as fertilizer. The Paris market gardeners were famous for the quality and extended growing season of their produce, and they maintained the privilege of selling on the streets and sidewalks around the Central Markets, alongside the dealers of fish, eggs, meat, cheese, and other produce who had permanent stalls inside.[10]

The Paris example inspired James Newlands, borough engineer for Liverpool, to set forth the advantages of central markets in an 1865 report to the Markets Committee of Liverpool, titled *A Short Description of the Markets and Market System of Paris, with Notes on the Markets of London*. The current state of marketing in the French capital as it had evolved over the decades, he reported, was such that "the city of Paris, by the rapidity of its communications, becomes more and more a place of general provisioning for importation, and even re-exportation. That it is indispensable to the vitality of the commerce in food to preserve a great centre of action, where the producer is certain of a place for his goods, and the consumer is as certainly able to find all that he has need of; that this convenience is the sole means of keeping prices within just limits, and of assuring consumers abundance and economy."[11] The principle of just price at a central market depended on the concentration of buyers and sellers with equal access to market information. Newlands also cited a landmark court decision in 1858 that ruled in favor of the Lesage Brothers, a large fruit and vegetable firm in the district of Les Halles. The ruling permitted the firm to deliver articles direct to their wholesale customers without first holding them at the public market for the household trade. This ruling paved the way for expanded legal protection of the wholesale trade.[12]

Newlands was among a new generation of civil engineers and municipal authorities inspired by Les Halles. In 1867, Theodor Risch, a member of the Berlin city council, published his own comparative report on the market systems of Europe. He and his contemporaries hoped that a modern food provisioning system along the lines of the one in Paris would elevate Berlin's status as a cosmopolitan city. Shortly after becoming the capital of the German empire in 1871, the city built a state-of-the art central market in Alexanderplatz to supply its municipal retail market houses. Berlin officials also relaxed trade constraints in and around the central market in an effort to stimulate the growth of shops and the street vending trade.[13]

Late nineteenth-century bureaucrats, civil engineers, and architects in Europe praised central markets for their economic contribution to life in the modern metropolis. As they tried to grasp an understanding of the wholesale market's administrative demands, complex social and economic networks, and reciprocal relationship to the urban infrastructure, these amateur economic geographers believed that the union of wholesalers, under careful municipal administration and regulation, would stabilize food prices and supply in major metropolitan areas throughout Europe. Central markets, in the European context, required careful planning and sophisticated building, storage, and transportation technologies. Published architectural plans were in wide circulation for central markets of varying size, scope, and site requirements—as they were for other massive building projects such as ice works, slaughterhouses, train stations, and cold storage. Modern facilities that combined wholesale and retail functions had become hallmarks of urban planning and government food policy throughout the United Kingdom, Continental Europe, Russia, and Scandinavia.[14]

In the United States, food planning was still a local matter, and municipal government faced shifting priorities for public funds and legal limits on municipal debt. These factors limited the city's ability to coordinate and centralize a changing food landscape to the same degree possible in Europe. American wholesalers conducted their business in public markets, renting stores, warehouses, wharves, piers, and rail yards—spaces that they had not specifically designed for the trade. Their customers—the buyers of bulk produce shipped in from distant markets—were compelled to travel to different parts of the city in order to procure their stock, only to truck it once again to their stores. Added to this chaos was the lack of adequate parking for farmers who brought local produce into the cities during the growing season. Perishable produce arrived by water, rail, and road in such quantities and at such a pace that no single space existed to handle it effectively.

In 1891, Mr. I. Hayes Sadler, Her Majesty's British Consul in Chicago, sent a memorandum to the Royal Commission on Market Rights and Tolls in which he described the lack of municipal control over wholesale produce markets in his host city. According to Sadler, the Chicago produce district was "subject to no official control except such as is generally exercised under the city health and police regulations, and the general rules of State inspection." He added that "what are now called markets are either voluntary and independent centralizations of dealers in one particular locality, or trading companies incorporated under State law either as exchanges or storage places, or for the sale of different commodities." Not much had changed since 1870, when a Chicago informant reported to Horace Capron, the US commissioner of agriculture, that private fish and meat shops were "scattered promiscuously" over the city, and "next to a great hardware-house you buy a roast, and the latest novel is side by side with white fish caught in Lake Superior." Two related conditions—the lack of a uniform regulatory system to manage the channels of food distribution and the lack of coordinated facilities—summarized the official view of everything that was wrong with the marketplace for fresh food in the late nineteenth-century American city.[15]

The Produce District Develops an Identity

From the perspective of city wholesale dealers, their situation was not so grave. They took advantage of occupying buildings and spaces made available by the exodus of residents and certain types of commercial activities from downtown as the city expanded.[16] The Gansevoort market district in New York provides an exceptionally well-documented account of this spatial and economic transformation, whose genesis was the large municipal marketplace established on a former rail yard in 1879. Wholesale dealers set up shop in modified residential row houses and commercial buildings near the marketplace in order to be close to the supply of fresh produce that farmers hauled into town by the wagonload. Commission men carted the goods from the marketplace to their stores, where they picked over the stock and packed it for resale. Dealers also stocked their stores with produce that they had trucked from the incoming rail and steamship deliveries at the Gansevoort-Chelsea piers. They sought the highest price from their buyers, collected cash from sales, and remitted the same to the grower or shipper,

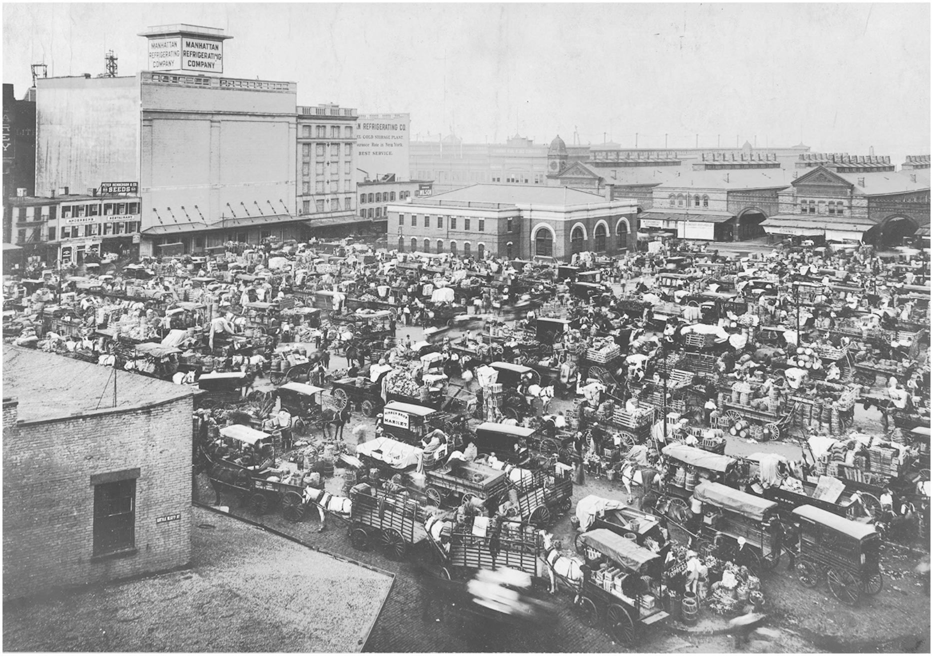
MANHATTAN REFRIGERATING COMPANY
MANHATTAN REFRIGERATING COMPANY
SEEDS

Figure 2.1. *Manhattan: West Street—Between Gansevoort and Little West 12th Streets.* Irma and Paul Milstein Division of United States History, Local History and Genealogy, New York Public Library. New York Public Library, Digital Collections.

minus the commission. The marketplace was a particularly convenient location from which dealers could supply the city's vibrant restaurant business downtown as well as the commercial and residential neighborhoods developing uptown (fig. 2.1).[17]

The triangular block formed by the intersection of Gansevoort, Little West Twelfth, and Washington streets exemplifies in microcosm the adaptive reuse of residential building stock used by the emerging wholesale trade. Early stores mirrored their residential cousins—the brick row houses that builders and developers modified to suit the needs of owners, merchants, working-class families, and laborers. Basically a variation of the ancient shop-house combination (shop at street level and living quarters above), the basement provided cool storage, the ground floor provided commercial space to display and exchange merchandise, and the upper floors served as offices or residences.[18] In 1889, the owner of a row of midcentury houses at 8, 10, and 12 Little West Twelfth Street modified the facades with new balconies and iron storefronts for produce merchants Robert Coutant, Claus Cordes, the

Mallard family, and Vincent Cioffi. Just around the corner, at 51 Gansevoort Street, McKenna & Co., *produce,* listed in the 1889 city directory, was tenant of a former stable. The rehabilitation and conversion of obsolete and deteriorated building stock for new commercial purposes offered affordable alternatives to newcomers in the food trades—the same process that motivated urban pioneers in New York to modify existing row houses for modern residential purposes decades later.[19]

A new building type and one that was prolific throughout much of the Gansevoort market district was the two-story sectional market building divided into stores of equal size. The wholesale trade considered the building type to be functional and economical, and so it persisted into the twentieth century. Stores were equal in width and height, with ground floor bays (at least on the street side) designed to facilitate loading and unloading, offices on the second floor, and a continuous metal canopy over the sidewalk. A typical sectional market building at Gansevoort held the address numbers 823, 825–827, and 829 Washington Street. The architect Joseph M. Dunn, with builder Michael Reid, designed the building in 1880. Dunn chose the Neo-Grec style, one of many revival styles popular in the mid-to-late nineteenth century. The style had simple elevations and lacked the elaborate cornices more often associated with elegant residences of the period. Facades, if decorated at all, might make repetitive use of isolated motifs such as medallions and urns derived from Greco-Roman ornament. This row, and others like it, housed small dealers who were perhaps more transient or whose businesses were more subject to seasonal variations than dealers who took up quarters in the district's more elaborate buildings and warehouses. By the end of the century, city directories had recorded at this address a variety of commercial tenants, including dealers in produce, butter, cheese and eggs, a grocer, and a saloon operator.[20]

As fast as developers built two-story market buildings in the Gansevoort district, the city tried to keep pace with the demand for more wholesale commercial space. Thomas F. De Voe, superintendent of markets for the City of New York, reported in 1873 that his department already operated 338 sectional market buildings on filled land across the street from Washington Market. Known as West Washington Market, the structures "were all neatly painted, and in design of uniform height, affording commodious, well-lighted and comfortable offices, and other conveniences." Dealers stocked the market year-round with "an endless cornucopia" of produce from the farms and gardens of New Jersey and Long Island and imported produce shipped in by ocean steamers and inland navigation.[21] In the 1880s, the city opened the new West Washington Market next to the open square at Gansevoort Market—a complex that consisted of ten two-story brick market buildings, each measuring 183 feet long by 50 feet wide and containing a total of 420 stalls illuminated by electric lighting.[22]

Just as two-story sectional market buildings offered generic quarters to small businesses, multistory store-and-loft buildings and warehouses were the structures of choice for large firms that could afford to rent or build more exclusive quarters in order to carry on food processing, packing, and shipping. Amid the modified row houses and modest two-story sectional market buildings was the imposing five-story store-and-loft building at 53–61 Gansevoort Street, designed by the architect Joseph M. Dunn for the prominent Goelet family in 1887. Early occupants included the New England Biscuit Works, Holmes & Company, produce dealers, and the E. S. Burnham Packing Company. Burnham was a long-standing tenant and founded by Michigan native Elmer S. Burnham (c. 1854–1941), who specialized in canned goods, particularly clam chowder and clam bouillon, and later moved to drugs and sundries.[23]

The Manhattan grocer James E. Nichols described in 1895 just how far buildings for the grocery trade had come since the days of "the old-time merchant":

> The great grocery firms of New York are similar in that they occupy their own homes, some of them covering the greater part of a city block—enormous ten-story buildings where from basement to top story is stored the most complex stock to be found outside of a department store; lighted by electric lights, reached by fast-running elevators. . . . On the ground floor is located the shipping department, where from twenty to twenty-five great two-horse trucks and delivery wagons can be loaded at once with expedition and accuracy. Another floor is usually given over to the offices and counting rooms, handsomely finished off, where a force of clerks . . . is kept busy recording the infinite detail of the firm's transactions.[24]

Nichols may have been alluding to his own firm, Austin, Nichols & Co., which got its start in the Washington Market district. In 1915, Austin, Nichols was one of the largest wholesale grocers in the world, when it opened a mammoth warehouse designed by Cass Gilbert (1859–1934) on the Brooklyn waterfront.[25]

A unifying feature of the Gansevoort market district was, and still is, the sheet-metal awning that extended over the sidewalk to protect produce handling. Most awnings were not original to the building but rather later additions for adapting the building to commercial use. The material, size, and placement of awnings varied over time and were subject to the vagaries of building codes. Manufacturers of commercial awnings initially favored canvas duck, since it was readily available for tents and sails. They fixed canvas awnings to wooden frames bolted directly into the building facade and switched to iron plumbing pipe for awning frames after the Civil War. Liborio Tringali, whose workshop was located at 168 Hudson Street, was one of the city's leading suppliers of iron-frame awnings for commercial use.[26]

Ice-making plants, refrigeration, and cold storage were other defining features of the Gansevoort market district. Some firms expanded their role in the local food economy after gaining permission to install underground pipes beneath public streets in order to distribute cold brine to food markets and processing plants. After 1906, when the Manhattan Refrigerating Company installed 2,800 feet of underground pipes at Gansevoort, this new technology spurred food distribution businesses and industries engaged in long-distance (including transatlantic) shipment of produce. By 1910, Gansevoort was a vast district unified by rows of wholesale stores punctuated by monumental warehouses, cold storage, and processing plants. These features provided the impetus for the area's subsequent shift to meat handling after fruit and vegetable dealers left Gansevoort for the new Bronx Terminal Market.[27]

The demand for local produce continued to spur the establishment of more municipal farmers' markets and produce districts as New York's population grew. Gansevoort Market, initially designed to accommodate three hundred wagons, was quickly insufficient to handle the more than two thousand farmers who brought produce daily into the city. Within a few years, demand for additional space fueled yet another market—this time, a purpose-built enclosed wholesale market in Brooklyn. Wallabout Market, established in 1891 on lands previously owned by the federal government, soon became one of the world's largest "middle-of-the-night" wholesale markets for regional produce, especially from Kings County.[28]

Beyond New York City

Although produce districts in other parts of the country varied in scale depending on the size of the city, building stock for commission merchants and other wholesalers was relatively consistent in form and function. Namely, stores lined an extrawide street and consisted of masonry load-bearing walls, two to four stories in height, with wide bays on the ground floor and awnings over the sidewalk. Larger, more substantial buildings handled food processing, manufacturing, and storage, or they housed firms engaged in the allied food trades, such as distributors of general groceries, equipment, paper products, and other items sought by stores, restaurants, hotels, and other food retailing establishments.

The grocery trade was particularly dominant in the produce district in Cleveland, where pioneering forwarding agents and commission merchants got their start on the Flats along the banks of the Cuyahoga River. Cleveland commerce and industry expanded rapidly with traffic on the Ohio and Erie Canal, steamship commerce on Lake Erie, and rail service to New York, St. Louis, Baltimore, and Chicago. Merchants who formerly carried a variety of dry goods found a market for handling groceries and fresh produce. In need of larger quarters, they moved from the Flats to the Warehouse District on West Ninth Street. Hilliard and Hayes was the first firm to make this move, when it opened a new dry goods and grocery store at 1407–15 West Ninth Street in 1850. The Weideman Company, established in 1861 by German-born John C. Weideman, also settled in the Warehouse District, where it distributed fancy goods under its own “Weideman Boy” brand throughout the Midwest. Following a similar pattern of movement and growth was the Haserot firm—a regional importer, canner, and distributor of fruits and vegetables founded by Francis H. and Samuel F. Haserot in the 1880s.[29]

A major contribution to Cleveland’s expanding trade in perishable produce was the Sheriff Street Market and Cold Storage, which opened on Christmas Eve in 1891. The mammoth multipurpose market building occupied the entire block of Sheriff (now E. Fourth) Street between Huron and Bolivar. The Cleveland-based architectural partnership of Lehman and Schmitt designed the four-hundred-foot-long structure with a great glass-domed pavilion in the center framed by two six-story cold storage towers at each end. On the interior, the ground floor market contained 312 stands divided by five main aisles, and the second-floor gallery housed several restaurants and the offices of commission merchants. The market had its own electric power plant and leased cold storage on the premises—a feature that attracted butter supply shops, wholesale grocers, poultry companies, and related businesses to the Warehouse District. The Sheriff Street Market remained the largest food market in Cleveland until the city built West Side Market in 1912 (fig. 2.2).[30]

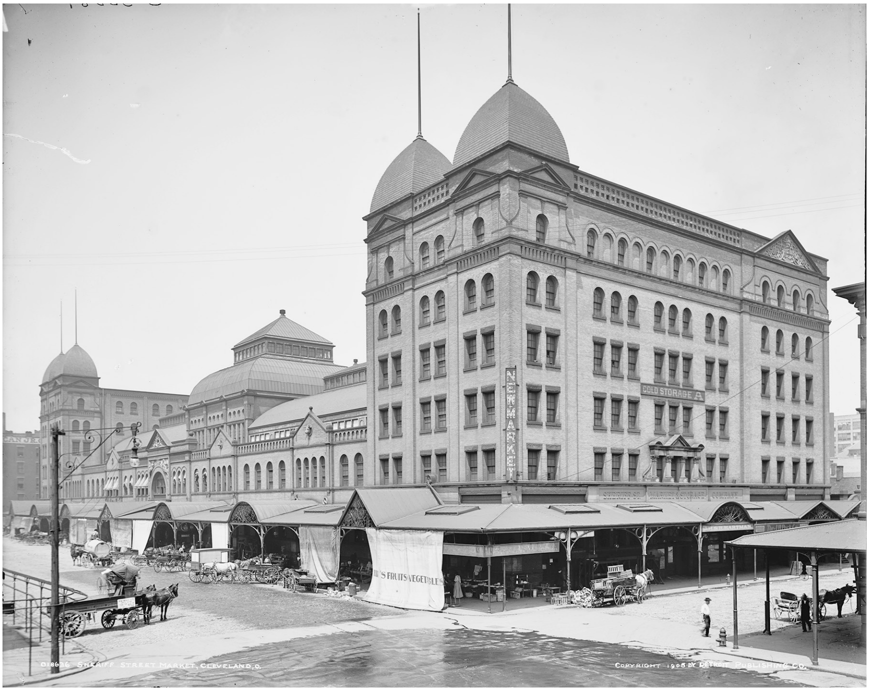
NEW MARKET
COLD STORAGE A
'S FRUITS VEGETABLES
018636 SHERIFF STREET MARKET, CLEVELAND, O.
COPYRIGHT 1905 BY DETROIT PUBLISHING CO.

Figure 2.2. *Sheriff Street Market, Cleveland, Ohio, 1905*. Library of Congress, Prints and Photographs Division, Detroit Publishing Company Collection, LC-DIG-det-4a12712.

Cold storage contributed to agglomeration in the late nineteenth-century produce district for a number of reasons. Hailed at the Chicago Exposition of 1893 as a beneficent undertaking—a public utility of sorts—cold storage extended the length of shelf time between storage and consumption and enabled food reserves to temper fluctuations in supply and price. Cold storage investors found a ready clientele in produce dealers who came to expect the service as part of their business operations. They built monumental warehouses for longevity and capable of storing huge inventories on behalf of their customers, especially after mechanical refrigeration replaced harvested ice in the 1890s. The Quincy Market Cold Storage Company in Boston, for example, first organized in 1881, offered temperature-controlled storage in a small building at the corner of Commercial and Richmond Streets, strategically located near the wholesale dealers. Over the next few decades, the firm consistently added new warehouses to its real property inventory, culminating in 1906 with construction of the world's largest storage house for eggs—a product traditionally marketed locally and on a small scale. The building had the capacity to store 150 million eggs at one time. Another important development in the firm's hold on the produce trade in Boston was the invention of a compressed engine to circulate cooled brine through insulated pipes to its final destination. In 1895, the Quincy Market Cold Storage Company received a permit from the city to lay and operate cooled brine pipeline beneath the streets. By 1915, the firm delivered cold brine to seventeen warehouses, several market companies, and as many as five hundred independent concerns in Boston. As such, cold storage extended the life of the produce district itself by creating a fixed network of buildings and infrastructure to satisfy the provisioning system of the entire city.[31]

Physical shelter for wholesale dealers was in such short supply in the late nineteenth-century city that commercial real estate owners were particularly active as property owners for new dealers entering the trade. In Galveston, Texas, for example, property owners upgraded their frame buildings on the Strand, the five-block business district situated between Twentieth and Twenty-Fifth Streets, with attractive iron-front brick buildings in an effort to attract wholesalers as tenants. Shipping companies also financed some of these real estate ventures, since their owners already had distant business connections with produce suppliers. D. D. Mallory of Baltimore, son of the founder of the New York and Texas Steamship Company, financed construction of the Produce Building at 2114 Strand one year after the Galveston Fire of 1877. At the same time, the Heidenheimer-Hunter Building, a three-story Italianate stucco masonry structure, opened at Twenty-Second and Mechanic Streets. Its first tenant was the wholesale grocery firm of George Seeligson, followed by Hermann Marwitz, a ship chandler and wholesale grocer who remained in business there until around 1900. The spurt of commercial development on Galveston's Strand kept nationally renowned architects and engineers busy with large building projects, such as the Galveston Ice and Cold Storage Company, built at 102–104 Twenty-First Street and the Strand in 1913. Widmann & Walsh, architects from St. Louis, designed the cold storage warehouse and were among the country's leading experts in the design of breweries and stores for wholesale grocers and commission merchants. Gilsonite Construction, also from St. Louis, was the contractor, and Louis Block, a consulting engineer from New York, designed the mechanical equipment. The streetscape of Galveston's Strand, like that of Gansevoort Street in New York, King Street in Wilmington, or West Ninth

Street in Cleveland, was a composite of buildings that differed in style, scale, and function but that collectively contributed to an amalgamated food trade.[32]

Agricultural Economics and the Shelter to Come

The improvisational development of the produce district mirrored the wholesale trade itself, as the enormous traffic in food permeated virtually every part of the city—a fact that was beginning to attract the attention of economists on the eve of the twentieth century. Take Chicago, for example—a city that participants and observers of food marketing both admired and abhorred. In 1914, shoppers patronized the stallholders at the municipal public market on Maxwell Street, any one of the twelve thousand grocery stores and butcher shops, approximately one thousand delicatessen stores, and thousands of basket peddlers—all retailers who themselves had purchased most of their stock from the produce district on South Water Street. This vast commercial spine housed approximately 350 middlemen as well as wagon teams—sometimes numbering between eighteen thousand and twenty thousand on a given day—that backed up to the sidewalks to either pick up or deliver produce. Although the sidewalks were always crowded with boxes, baskets, barrels, and crates, buyers would clear the way for pedestrians, as the street belonged to anyone who was willing to negotiate it. South Water Street earned the title of "busiest street in the world," and those who knew it well simply called it "The Street."[33]

For better or worse, this ten-block stretch of old brick and stone buildings, mostly dating to just after the Chicago Fire of 1871, was the heart of an urban food marketing and distribution system that was under scrutiny in the first decades of the twentieth century. An early critical respondent to the negative public discourse was Edwin G. Nourse (1883–1974), a famed economist whose early rise began after receiving his PhD in economics and sociology from the University of Chicago in 1915.[34] The University of Chicago offered courses in the science of marketing, theory of the firm, and statistics, but theoretical inquiry and its application to food marketing and distribution were just gaining ground as an empirical branch of economics. In this intellectual environment, Nourse had chosen the Chicago produce market as his dissertation topic. The time was right, for Nourse sought to understand how current channels of food marketing and distribution might influence food prices before the Chicago Plan Commission moved the wholesale trade from

South Water Street. At stake was a costly plan of the commission to split the wholesale trade between new freight handling centers at the mouths of the Chicago and Calumet Rivers.

Nourse embarked on unusual fieldwork that took him frequently on the seven-mile streetcar trip from the University of Chicago to South Water Street—much to the initial dismay but with the ultimate support of his academic advisers. His dissertation topic was natural for an aspiring economist who had a personal connection with the market, which he often visited as a boy with his farmer father and frequented later during his own brief stint in the egg business. Nourse recalled that he and his fellow shippers considered the South Water Street Market to be a very unsatisfactory price-making apparatus for perishable products, so he set out to understand the market's structure with a view toward recommending ways to improve its efficiency. Nourse recognized the gravity of the market problem and insisted on a "slow and careful process of scientific study" in order to solve it.[35]

Describing his purpose and methodology, Nourse "probe[d] around on the slippery sidewalks, among the boxes and bales with the not always literate and often unfriendly personnel of the market to gain an understanding of what the market structure was and what influence it had on the market process that was being empirically worked out there." He also subscribed to several journals of the produce trade, noting: "I clipped and I talked and I pondered and I wrote."[36] It was easy to be captivated by the produce district. Even Nourse's biographer, Joseph Grant Knapp, recalled, "No one who did not know the old South Water Street market before it was moved to the suburbs to make way for Wacker Drive in the mid-1920s can appreciate the squalid, untidy mess that was the old South Water Street market" (fig. 2.3).[37]

Nourse found Chicago to be one big "market city"—namely, a city, food warehouse, terminal, and market all in one. In addition to livestock and cereals, it was a depot for seasonal produce from the southern and northern states; for Minnesota butter, Iowa eggs, and Colorado cantaloupes; and for northwest apples and California fruits and winter vegetables. The principal products received from the eastern markets included bananas, lemons, grapes, cheese, cabbage, and other fruits and vegetables. Incoming produce satisfied Chicago's three million consumers or else agents shipped it to other consuming centers and points of export.[38] It was the very place where supply and demand converged: "The fact is that it is the market itself which determines whether shippers shall find it convenient and profitable to ship

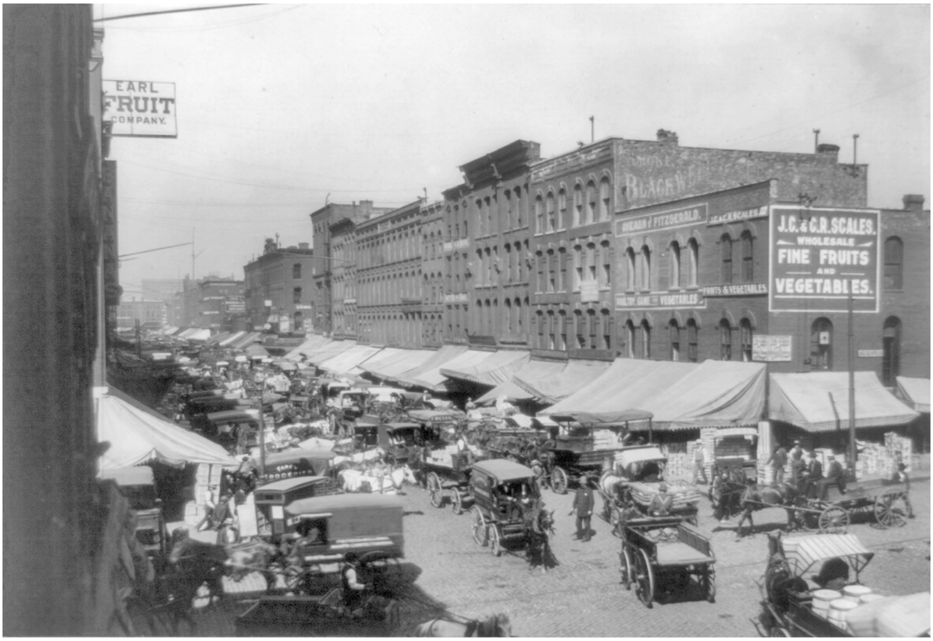

Figure 2.3. *South Water Street, Chicago, 1899.* Library of Congress, Prints and Photographs Division, LC-USZ62-95802.

their goods to Chicago; it is the market which, by its alertness, finds neglected sources of supply or more direct, safe, and economical means of bringing goods to the city. Likewise, it is the market which, by reason of its quarters or its manners, attracts buyers or repels them, reaches all the demand or only part, educates taste, alters habits of consumption, creates and directs demand."[39] These observations led Nourse to conclude that the South Water Street Market—and by implication, wholesale produce markets in other cities—was not passive in the price-making process.

Nourse found a system in the apparent chaos. The Chicago produce market was a vast network of small and personal businesses, each specializing in one or more aspects of a constantly moving system that handled the distribution of perishables. The produce industry had grown by enlarging contacts with producers and buyers intimately connected to varied conditions in their localities, and even across the globe. The system was too complex to operate as a routine within the confines of a monolithic building, such as Marshall Field or Sears-Roebuck had achieved with the marketing and distribution of manufactured goods in their chain stores. Any improvements in the physical arrangement or facilities for the produce trade would depend on cooperation with the railways, cold storage companies, special terminal corporations, and city government in building a new wholesale terminal market. Nourse did not think that it was the city's responsibility to build and operate city markets for jobbing and retailing purposes, any more than it was the responsibility of the municipal government to "build shoe stores or operate restaurants for its people." Yet, it was the responsibility of the municipality to "make conditions favorable to the proper functioning of our market system. It should see to it that foodstuffs find access to the city by the readiest possible means."[40]

Improved market infrastructure and municipal support were only part of the equation, for Nourse called on revolutionary changes to the marketing system itself. Dismissing popular calls to "eliminate the middleman" with more direct selling, Nourse called on the cooperative associations of producers—who currently broke down into the three classifications of packing, shipping, and distributing—to coordinate their functions in order to reach the ultimate goal of putting their goods "in finished form for the market." "By federating the local organizations into district associations and these in turn into a comprehensive selling exchange, these advantages of consolidation can be secured without disturbing the local character and independence of the growers' association." Nourse cited the success of the California Fruit Growers' Exchange, which managed produce prepared under the supervision of local organizations that shipped through a district exchange, which in turn acted as a clearinghouse for produce directed to bonded representatives in the principal markets, who in turn disposed of the produce on behalf of the shipper. This type of system would facilitate quality control, inspection, responsiveness to supply and demand, and standardization of product. As it stood, the Chicago produce market suffered from internal problems within the trade itself. "The retail situation seems to be deadlocked. The jobbers have made little if any progress toward establishing broad and helpful connections between the supply center and the local dealer as a focus of demand." Improvement could not be made overnight. Chicago faced an immense responsibility and challenge, but it was not beyond rectification. The most important step toward progress was to regard readjustment "as a continuing program or an advancing ideal, not as a fixed point to be reached and held." He also acknowledged the valuable work of the Bureau of Markets at the United States Department of Agriculture, but recognized that as a national agency it was limited in any direct authority over local conditions.[41]

Nourse's dissertation was the first critical study of the physical, institutional, and geographical setting of a wholesale fruit and vegetable market in a large city and its application to economic inquiry. Published in the prestigious Hart, Schaffner & Marx Prize Essay Series in 1918, *The Chicago Produce Market: The Study of Market Mechanism as a Factor in Price Determination* quickly became a standard reference in the emerging academic discipline of agricultural economics.[42] It paved the way for further discourse, scientific study, and critical thinking on the future of the wholesale produce market in large cities. Nourse's approach to the Chicago produce market was also emblematic of broader expertise brewing in the new field of agricultural economics—a field of applied economics whose proponents would change, or at least try to change, the shape of city markets to come.[43]

Henry C. Taylor, founder of the first department of agricultural economics at the University of Wisconsin in 1909, defined the discipline as a distinctive field of research, whose function was to secure maximum net profits for the farmer and maximum well-being for the nation.[44] Farm management was an important subfield of agricultural economics and traditionally based on agronomy and the physical, technical, and scientific aspects of production. Now its teachers promoted new marketing outlets and modes of organization that would give farmers greater bargaining power, notably through marketing cooperatives, and their underlying assumption was that one did not need to be a farmer to understand agriculture. The early agricultural economists sought to understand "the big picture," and many of them went on to staff the USDA, especially after 1922, when Agriculture Secretary Henry C. Wallace appointed Henry C. Taylor as chief of the new Bureau of Agricultural Economics (BAE).[45]

Some pioneers in the field remained wedded to their rural roots and established academic careers as professors in agricultural colleges, while others moved freely between public service and industry as practitioners. Historians have associated the agricultural economists active during the New Deal, such as Howard R. Tolley, BAE chief from 1934 to 1946, with the institutionalist movement, whose followers viewed the food system and the infrastructure that sustained it as a complex interaction of institutions. According to institutionalism, individuals, firms, states, and social norms were legible and could be so regulated as to rise above the interests of any one group. This theoretical framework informed USDA research on food systems planning for large cities during the New Deal.[46]

The BAE was the single most important outlet where a young generation of social scientists could put into practice the field of agricultural economics, as well as agricultural history, rural sociology, and land economics.[47] For experts in city marketing, the produce district that had come of age in the late nineteenth century was their physical laboratory for economic change in the twentieth century. Just as Nourse had discovered in Chicago, so too did Walter P. Hedden discover in New York that the wholesale produce market was not a distinct building or something that could "be put under one roof, such as the Center Market at Washington, DC"—referring to the Victorian market house on Pennsylvania Avenue in the nation's capital. Hedden, at the BAE on a special assignment in New York, knew that the popular perception of a wholesale market was entirely inadequate when applied to a city with a population of 500,000 or more. As he put it, the wholesale market for fruits and vegetables was "an aggregation of railroad yards, piers, sheds, streets, stores, sidewalks, and wagons and trucks. There is nothing static about this kind of market. In order to see all of it in operation, one must be continually on the move." Hedden spoke from experience, having just completed a systematic and scientific survey of the food supply and per capita consumption for the Port of New York Authority, in the wake of the country's sudden threat of total suspension of rail transportation in October 1921 (fig. 2.4). After the crisis had passed, Hedden rose to become chief of the Bureau of Commerce of the port authority as well as the author of *How Great Cities are Fed* (1929), published in the Heath Agricultural Economics Series edited by Edwin Nourse, by then at the Institute of Economics in Washington. According to Nourse in the editor's foreword, Hedden turned to "the abstract field of the economist to see what reasoned explanation may be adduced to explain the present organization of this gigantic traffic [in produce] and to devise ways and means whereby it may in the future be carried on more efficiently and, if possible, at less cost."[48]

In the process of gathering, analyzing, mapping, and graphing data, Hedden and other experts would define the features of a new food marketing system for the twentieth century. They envisioned the nineteenth-century produce district reconfigured for truck traffic, new wholesale produce terminals connected to freight lines and port facilities, and state-supported regional markets established on landlocked sites. The USDA would help state and local government, city planning commissions, railroad officials, and

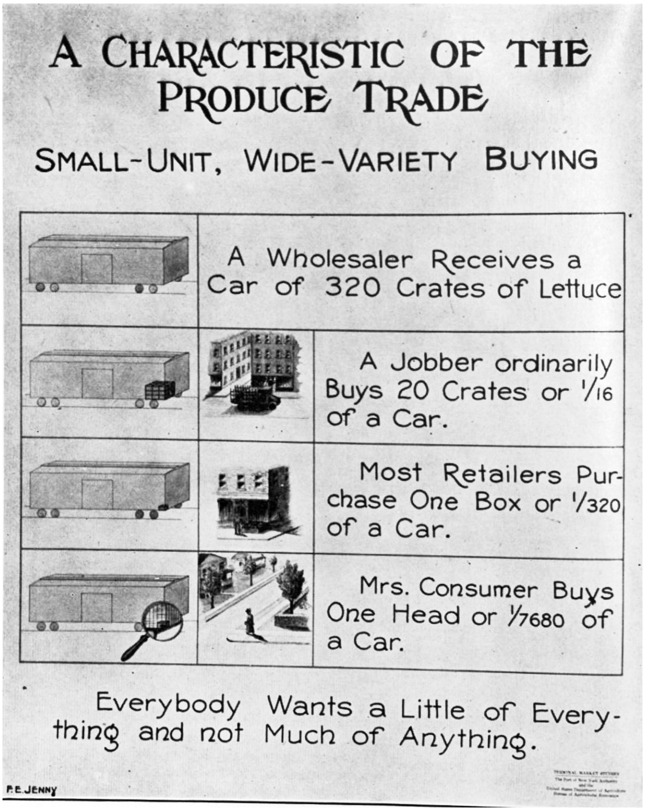
A CHARACTERISTIC OF THE PRODUCE TRADE
SMALL-UNIT, WIDE-VARIETY BUYING
A Wholesaler Receives a Car of 320 Crates of Lettuce
A Jobber ordinarily Buys 20 Crates or 1/16 of a Car.
Most Retailers Purchase One Box or 1/320 of a Car.
Mrs. Consumer Buys One Head or 1/7680 of a Car.
Everybody Wants a Little of Everything and not Much of Anything.
P.E. JENNY

Figure 2.4. *A Characteristic of the Produce Trade: Small-Unit, Wide-Variety Buying.* From Walter P. Hedden, *Produce Terminal Requirements in the New York Area.* New York: Port of New York Authority; USDA, Bureau of Agricultural Economics, 1925.

grower cooperatives in visualizing exactly what a modern wholesale produce market should look like by providing models and sample plans on request, and its technical bulletins encouraged standardization and efficiency in building construction, terminal layout, and business practices. Its goals for city dealers had parallel in the countryside, where the USDA extension service provided similar instruction to farmers on matters of bookkeeping, the arrangement of buildings on their farms, and the embrace of technology.

In the pursuit of greater efficiency in the physical facilities for marketing and distribution of agricultural produce in large cities, experts still mulled over the middlemen—who they were, what they did, and whether or not there were too many.[49] They did not always agree, nor could they arrive at a standard nomenclature to describe the various kinds of middlemen. Louis Dwight

Weld, an agricultural economist and author of the massive textbook *The Marketing of Farm Products* (1916), provided strict definitions for a wholesale receiver, commission man, jobber, broker, purveyor, and other intermediaries, but he was quick to admit that there was a confusion of terms even among the dealers themselves. He also pointed out that the lines of demarcation were not always clear, as some dealers functioned as brokers or receivers while referring to themselves as jobbers—the term used for wholesalers who buy produce outright for resale. Likewise, a purveyor for hotels, restaurants, and steamship lines occasionally functioned as a jobber for a grocery store. Furthermore, depending on the size of the city or the scope of the trade, one dealer might undertake to combine and perform functions formerly performed by two or more successive middlemen—what is known in the field as "integrated marketing." In fact, as Weld observed, adjustments in the division of functions were going on all the time, as "traders are continually experimenting, unconsciously perhaps, in extending or restricting their functions, irrespective of the desires of other traders on whose territory they may be encroaching." These adjustments complicated the task that lay ahead for market reform in large cities.[50]

The one thing that academics, bureaucrats, and members of the trade could agree on was the necessity of the middleman, however many in number and however defined, and they reflected on his achievements with various degrees of praise. At the high end of the praise scale was Raymond G. Phillips, member of the Joint Council of the National League of Commission Merchants of the United States, who declared in 1922 that "whatever faults the present system of distribution may have, it is the product of knowledge, experience, initiative, the keenest competition and the play of economic principles of years." Phillips also boasted that the industry had "created and developed markets as in no other country, distributing the perishable food products of the United States over the entire United States, in Canada, Europe, Australia, South America and Asia." Robert G. Deupree, another student of the middleman, was less laudatory and more matter-of-fact in his analysis of Baltimore's wholesale produce markets for his 1939 doctoral dissertation. As Deupree observed, "the resultant market structure is a haphazard compromise reached through the intermingling of conflicting vested interests, opportunism, inertia, and physical limitations."[51]

Where did the municipality stand on the middleman amid the flowery declarations of experts? City officials had found a justification to accept his inevitability. With the rise in economic standing and sheer physical presence of intermediaries in the food trades, cities collected receipts for minor privileges from their services in order to extract a portion of revenue from the food economy, just as the municipality had done prior to open entry. According to the 1908 *Statistics of Cities Having a Population of over 30,000*, the cities of Cleveland, Columbus, Dayton, and Akron collected fees from market gardeners for curb privileges and use of the sidewalks. Baltimore, New York, and Camden, New Jersey, commanded a fee for the ubiquitous awnings that extended over the sidewalks in their produce districts. Boston collected fees for the privilege of storing and selling produce on sidewalks. Chicago, Dallas, and Fort Worth charged for the privilege of placing scales in the public streets, while St. Louis, Washington, DC, and other cities charged refrigerating and cold storage companies for the privilege of laying pipes or conduit underneath the public thoroughfares.[52] Yet, despite open entry, or perhaps because of it, the future of food wholesaling in large cities was constrained for lack of room to expand. General incorporation laws, licensing, and freedom from forestalling ordinances may have secured a future for the middleman, but legal steps were just the beginning of a more comprehensive strategy by the state to shelter the produce trade. The boosterism had waned. Accounts of the produce district and its bustling energy, entrepreneurial spirit, and cornucopia gave way to widespread criticism of inefficiencies in the system, lack of modern sanitary facilities, insufficient infrastructure to support the volume and scope of the trade, and disreputable business practices ranging from anarchy to monopoly. After decades of self-regulation and unbridled growth in improvised quarters, the produce district and its operatives were destined to collide head-on with the Progressives.

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PART TWO

CONSOLIDATION

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CHAPTER THREE

Planning the Wholesale Terminal Market

> Everywhere it is agreed that a potent force for the amelioration of the condition of the consumers is found in the establishment of efficient Terminal Markets under municipal control for all progressive cities.
> —Madeleine Black, New York Terminal Market Commission (1912)

In 1913, representatives from government, the railroads, business schools, agricultural colleges, and trade organizations gathered in Philadelphia for a symposium sponsored by the American Academy of Political and Social Science on the topic of reducing the cost of food distribution. Dr. Clyde Lyndon King (1879–1937), editor of the proceedings and professor at the Wharton School of Finance and Commerce, pointed out that in 1910 American cities spent two dollars on cemeteries to one dollar on markets—"more, that is, on resting places for the dead than on food buying facilities for the living." Urban prosperity, he argued, depended on productive farmland combined with municipal wholesale markets for local produce—a feature in Munich where 25 percent of the city's local meat consumption came from neighboring farms. King also argued that a well-administered wholesale terminal market was already a feature in every European city, with specific mention of Budapest, Prague, Le Havre, Lyons, Brussels, London, and Paris, and a system on which urban prosperity in the United States would depend. The wholesale terminal market was a reliable and cost-effective clearing place for local, regional, and imported produce that ensured a year-round market for fresh food.[1]

Present at the symposium was Dr. Charles J. Brand, chief of the new Office of Markets in the United States Department of Agriculture (USDA). Brand declared that it was time for the federal government to take steps to improve the complex commercial organism through which crops passed from producer to consumer. Why had urban food marketing and distribution, traditionally the role of city government, become a topic of concern at the federal level? As Chief Brand explained, the current system was flawed by lack of modern wholesale facilities, unnecessary waste, spoilage, and a multiplicity of middlemen who handled perishables from farm to table. These systemic problems threatened the economic well-being of the entire country, which prompted the USDA to establish an Office of Markets that would tackle what reformers, specialists, and journalists referred to simply as the "market problem."[2]

The Philadelphia symposium heralded the federal government's shift in attention and resources from its long-standing focus on agricultural production and toward new matters of marketing and distribution. Experts in academics, federal government, and the trade joined forces to consider a unified network of organized farmers, wholesale distributors, and buyers of bulk produce in a new economic and spatial landscape designed to rationalize the movement of goods from the producer and consumer. This quest reflected the Progressive Era in microcosm, when reform guided the shared belief in man's ability to improve living conditions in an urban industrial society. Affordable healthy food for city dwellers, among other items high on the public agenda, would require cooperation and planning, the advice of experts, and government intervention in economic and social affairs.

Food Systems Planning for the Twentieth Century

In 1894, when the National Municipal League organized and united various city reform groups, the "market problem" was high on the agenda. Public markets, as centers of city life, were highly visible places where the urban problems of traffic congestion, poor sanitary conditions, and physical deterioration converged. Few people, even those who shopped for food elsewhere, could venture through the city without encountering them. Public markets were everyone's business and important gauges of a city's health and well-being, and most consumers could not imagine a society without them. Thus, on the eve of the new century, the National Municipal League, in its Municipal Program of 1897, recognized the right of cities to establish, maintain, and regulate markets—both wholesale and retail. It valued public markets and fought valiantly to eliminate the problems that threatened their survival through food systems planning.[3]

Food systems planning took into account the persistent view in the United States that markets in Europe were superior to those at home—a view that reached epic proportions in the Progressive Era, when American cities suffered from high food prices, traffic congestion, and dilapidated, unsanitary public markets. The superiority of European markets was expressed in terms of their organization and oversight, access to major transportation systems, solid and technically advanced architecture, elaborate meat inspection systems, regularly scheduled auctions, wholesale price reporting, accommodation of street vendors and open-air marketing, and coordination with municipal slaughterhouses and livestock markets. These features captured the essence of a *central* market, which American reformers praised and more commonly referred to as a *terminal* market. Although not necessarily centrally located, a terminal market would function as a hub or primary market for a radial system of smaller food outlets. Given that municipalities already had the right to operate public markets, municipal reformers considered it only fitting that cities take charge of terminal markets as well. The debates that ensued over municipal ownership of terminal markets were part of the larger movement to municipalize streetcars, subways, gas- and waterworks, and telephone companies. Ownership of markets was at the core of highly publicized investigatory commissions that followed similar debates in the British Parliament and in the city halls of the European capitals, where transnational borrowings, imitations, and adaptations were transforming public services.[4]

In 1907, Don E. Mowry, member of the National Municipal League, defined the municipal market as an economic necessity, because in bringing together the producer and consumer it eliminated extra handling costs. Mowry considered Paris to possess the best markets in the world with respect to sanitation and the availability of live fish. Berlin was another model, having followed the Parisian system of regulated municipal markets. The markets of London, however, were “in a very bad way” due to the custom of giving exclusive rights for markets to individuals, thus making it difficult to create a central market in the capital. Even worse, according to Mowry, were public markets in the United States, which were emblematic of persistent “laissez-faire policy with respect to questions which affect the future interests of the city,” by which he meant the food supply.[5]

Fueling America’s acceptance of the superiority of markets in Europe were consular reports from the United States Department of Commerce and Labor, which issued a special report, *Municipal Markets and Slaughterhouses in Europe*, in 1910. The publication featured extensive details on the administration, physical characteristics, principal goods for sale, and the chief features of the laws and regulations governing municipal markets in Austria-Hungary, Belgium, France, Germany, Netherlands, and the United Kingdom. The American consular officers prepared the reports at the request of Commerce and Labor, “in order that the Department might answer numerous inquiries received for information regarding the character and management of such institutions abroad."[6]

The consular reports praised the municipal markets of more than thirty representative European cities and towns. The consul general in Budapest, for example, reported that the large central market and its six branch markets fell under the control of a municipal commission and was governed "by a set of regulations admirably adapted to develop the highest degree of hygiene and efficiency." He was also "struck with their cleanliness and order, and the absence of noise and confusion which are so often found in many of the markets of the great cities of Europe and America." The report from Vienna described the city's forty open-air marketplaces and seven enclosed market buildings, the latter being "very large, well ventilated halls with stone floors, and are kept scrupulously clean." The Paris report confirmed the city's long-standing international reputation for fine markets. Namely, "the system of public markets through which the people of the French metropolis are supplied with meats, poultry, fish, game, vegetables, fruits, and other fresh-food materials, is one of the most extensive and carefully administered institutions of its kind in Europe."[7]

Equally full of praise were several consular reports from the United Kingdom, such as the one from Birmingham, whose municipal markets were "admirably administered in every detail, and a source of considerable profit after all expenses of management, of interest on the debt incurred to build them, and of a sinking fund to redeem that debt have been met. Excellent facilities are provided for all market purposes, and the markets are one of the prides of this great industrial center." Glasgow was admirable for its solid, stone market buildings that were "in keeping with the buildings in general throughout the city." The consul general in Glasgow also reported that the management and control of market property and affairs were "of the high order for which the corporation is noted."[8]

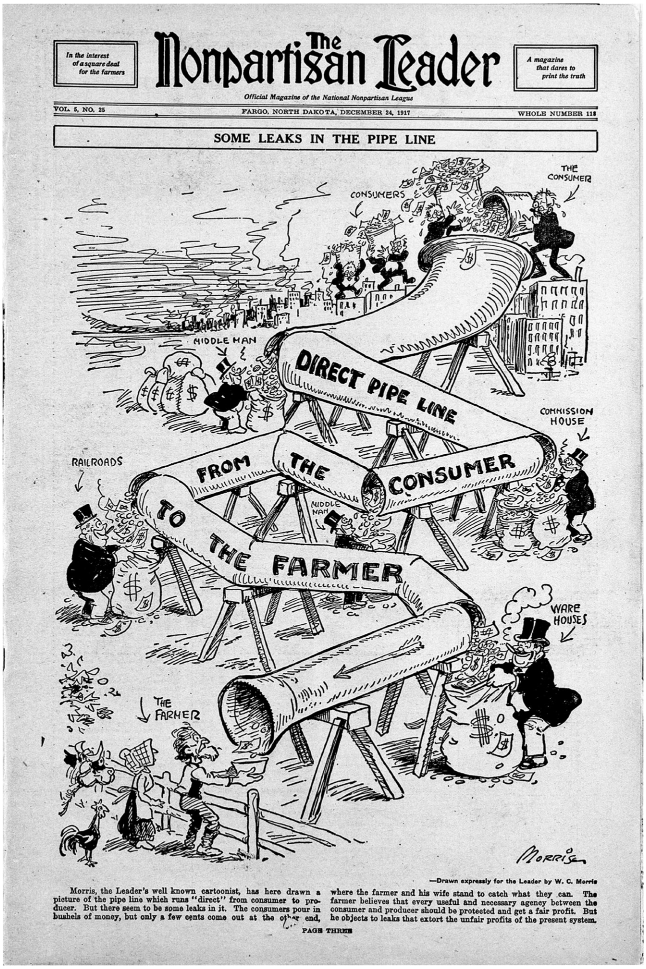
Anyone familiar with the American public market system at the time of this report could not help but be impressed by the centralized oversight of markets at the uppermost levels of local government in the European capitals. Whereas New York City markets fell under the control of seven different departments, Berlin managed fourteen markets with a single committee of five city council members and ten selectmen. This body exercised general control over the market halls and related buildings; fixed the rates and collected rent; appointed the principal managing officials, including the municipal sales commissioners, brokers, and auctioneers; and fixed the regulations by which they were bound. A coterie of civil servants worked under a managing director who had immediate control over all of the market halls. Eight inspectors monitored the markets, and each hall had an overseer, doorkeeper, guard, and a limited number of mechanics of the various trades. Berlin's public market system also employed approximately 150 people who handled the janitorial work.[9] The European consular reports from Germany also spoke to the interest of the American farmer in the use of parcel post for shipping produce from the farm to the consumer. Consul General Robert P. Skinner reported that Mecklenburg farmers sent pots of fresh butter and other produce by parcel post to thousands of families a day in Hamburg for much less in cost than American farmers paid express companies to ship their produce.[10]

The market systems within Europe did have subtle differences, but according to American observers, a single factor contributed to their overall success: the hub-and-spokes arrangement whereby one great wholesale market was the main source of supply for a radial series of retail markets. Proponents of central markets for American cities considered this concept not only ideal but also consistent with the existing mandate of municipal government to provide and manage other public services such as water, sewers, roads, and bridges.[11]

The High Cost of Living Debates

Fueling the universal call for improving the marketing and distribution of perishable produce was the nation's obsession with the high cost of living—a contentious public issue so widely discussed and depicted that many writers and artists simply used the abbreviation HCL.[12] As the purchasing power of the consumer was in decline, Congress introduced bills to establish commissions to inquire into the cost of living; state legislatures moved independently in the same direction; some cities formed their own commissions; and the USDA began its own investigations.[13] Cold storage was one of the suspects in keeping prices high, as critics accused warehousemen of withholding produce from the market in order to secure a high price while delivering an inferior or spoiled product. The farmer and the consumer were victims of this "double hold-up," as depicted in the October 6, 1909, centerfold of *Puck*. The cartoon shows a masked bandit labeled "Food Speculator" pointing handguns labeled "Cold Storage" at a producer and a consumer who have been ambushed on the "Road of Supply and Demand."[14] This familiar antimiddleman rhetoric also persisted in the agricultural regions of the Upper Midwest, where a particularly timely cartoon, "Some Leaks in the Pipe Line," appeared on the front cover of the *Nonpartisan Leader* on Christmas Eve in 1917. On one of the biggest food shopping days of the year, when consumers were most likely to feel the pinch of high food prices, the farmer would suffer low profits at the hands of the commission houses and railroads, which the cartoon labeled among other "speculators" and "parasites" who disrupted the "pipe line" of the food distribution system (fig. 3.1).[15]

The Massachusetts Commission on the Cost of Living was one of the more sophisticated agencies that sought to understand the causes and implications



In the interest of a square deal for the farmers

The Nonpartisan Leader

A magazine that dares to print the truth

Official Magazine of the National Nonpartisan League

VOL. 5, NO. 25 FARGO, NORTH DAKOTA, DECEMBER 24, 1917 WHOLE NUMBER 118

SOME LEAKS IN THE PIPE LINE

—Drawn expressly for the Leader by W. C. Morris

Morris, the Leader's well known cartoonist, has here drawn a picture of the pipe line which runs "direct" from consumer to producer. But there seem to be some leaks in it. The consumers pour in bushels of money, but only a few cents come out at the other end, where the farmer and his wife stand to catch what they can. The farmer believes that every useful and necessary agency between the consumer and producer should be protected and get a fair profit. But he objects to leaks that extort the unfair profits of the present system.

PAGE THREE

Figure 3.1. *Some Leaks in the Pipe Line*. From *Nonpartisan Leader* 5, no. 25 (December 24, 1917).

of rising food prices in large consuming centers in the northeast United States. Highly regarded by economists for its dependable data, the commission drew on the latest and most reputable price indices published in the United States and abroad. According to the Massachusetts Commission on the Cost of Living, the average Massachusetts family in 1903 spent 40.9 percent of its expenditures on food and the rest of its remaining household income on rent, clothing, fuel, lighting, and sundries (health, recreation, amusement, education, religion, and support of government). Meat constituted roughly two-fifths of the food expenditures, not surprising given that Americans exceeded all other western nations in per capita meat consumption (185.8 pounds) in 1900. Beef prices were steadily rising due to several factors, principally a decrease in the meat supply through a reduction in the number of farm animals, heavy exportation of beef in the years prior to 1906, the breakup of the western ranges, a sharp advance in the price of corn, and the increased cost of farmland. Other factors included the tariffs on beef imports, as well as recent federal inspection laws that reduced the number of packers willing to engage in the interstate trade. With influences beyond its scope, the commission held a defeatist position on reducing meat prices. It cited the prediction of the Honorable S. H. Cowan, who, in an earlier testimony before the United States Commission on Wages and Prices of Commodities, said: "There is no use for the people of the United States to think of ever getting any more cheap beef." The only recourse was to improve efficiencies in the distribution system for general produce, by eliminating unnecessary expense in getting it from the farm to the dinner table.[16]

The Massachusetts Commission focused attention on perishable foods marketed in its home base of Boston—a city whose service as a food depot and distribution center was vital to the welfare of its citizens, the metropolitan region, and the Commonwealth. In 1910, the wholesale produce district in Boston was physically immense in comparison to other cities. The original limits of Faneuil Hall Market comprised 2.75 acres when it opened in 1826; from 1866 to 1896, approximately 4 acres; and an act of 1896 extended the limits even further, to 30.6 acres, in an effort to gain jurisdiction over property for additional wholesale trading. Describing the consequences of this development was Dr. Edward Mussey Hartwell, the city statistician of Boston who prepared a history of the city's public markets for the 1910 *Report of the Commission on the Cost of Living*. Hundreds of wholesale dealers occupied privately owned stores, cellars, or market stalls in an area whose assessed real estate value in 1908 was $22 million. Dr. Hartwell highlighted the long-overdue acceptance of the trade: "What are known as marketmen, wholesalers or jobbers within the market, as well as the provision dealers, greengrocers and itinerant peddlers outside it, belong to the once obnoxious classes of misdemeanants stigmatized as forestallers, regrators and engrossers."[17]

Although the commission could not speak for the entire Commonwealth of Massachusetts, its published price quotations for food articles sold by a Boston wholesale produce establishment spoke to popular anxieties about rising food costs. Even though the price of beef held steady and the price for a bushel of potatoes had actually declined by 20 percent since 1900, wholesale prices for other food articles such as apples, cheese, butter, onions, and pea beans had increased drastically by 1910 as compared to their 1900 levels. Eggs, turkeys, and hogs showed the highest percentage increase in prices—100 percent during the same ten-year span. Recognizing the limitation of drawing conclusions based on absolute prices, the commission emphasized the need to consider prices relative to wages.[18]

The commission recommended an immediate and comprehensive study of the Boston market district that would improve the commission and jobbing houses in ways that would "render satisfactory and efficient service to the consuming public." The city enlarged the district and its borders over the decades, but its development and usefulness had been "retarded" for lack of modern equipment and facilities "for the prompt and economical handling of the ever increasing streams of incoming and outgoing commodities." The lack of a "comprehensive and progressive policy for the development of the market district after modern methods" had resulted in "needless expense of the necessaries of life to the millions of ultimate consumers who depend upon the Boston market district for their supplies." The responsibility for carrying out future improvements to the market system, the report concluded, should fall to a new body, a Commission on Market Improvements, whose members would represent the city government of Boston, the Commonwealth, and the commercial establishments and food merchants of Boston.[19]

In 1915, Boston's City Planning Board, chaired by the architect Ralph Adams Cram, supported the Port of Boston plan for a large terminal market on public ground between Summer Street and the Boston Fish Pier. At the same time, the board's market advisory committee recommended four new farmers' markets (in South End, South Boston, East Boston, and Roxbury) based on marketing studies conducted by graduate students at the nascent Harvard

Graduate School of Business Administration and at Massachusetts Institute of Technology.[20] The Boston plan pointed to the beginning of a comprehensive approach to food marketing in the American city. A two-pronged plan of a terminal for long-distance freight, plus municipal wholesale farmers' markets for local produce, appealed to the pioneers of American city planning. At least while terminal projects lagged in the debate or design stage, a municipal wholesale farmers' market offered cities a quick and risk-free solution to the food problem. For large cities, planners recommended more than one wholesale farmers' market in order to avoid wagon congestion downtown and to attract producers coming from different directions.

Questions of urban food marketing were new to the planning profession, whose practitioners focused attention on creating places of exchange in which wholesalers and shop owners conducted their dealings without the interference or involvement of household buyers. George B. Ford, noted architect, engineer, and city planner, considered "food supply markets" a necessary component in the city planning process.[21] In using the term "food *supply* markets," Ford emphasized the current thinking that markets were receiving and shipping points for a city's food supply rather than places where consumers shopped for their daily provisions. Ford's 1913 *Report on Markets* for the City Plan Commission of Newark, New Jersey, coauthored with E. P. Goodrich, credited "the large private stores" with satisfying the needs of daily shoppers and concluded: "Virtually the only successful markets today, which are municipally owned or run, are wholesale, not retail markets." Ford and Goodrich encouraged the City Plan Commission to abandon the historic Newark Centre Market, since "this property is extremely valuable for business purposes, and would undoubtedly, within a very short time, be covered with at least a $1,000,000 office building." In place of a retail market, the city should invest in a wholesale terminal market near the Pennsylvania freight terminal, with auction facilities, cold storage, and direct sales from freight cars to the retail merchants. Ford and Goodrich also recommended a new municipal wholesale farmers' market on a triangular lot between the tracks of the Pennsylvania freight terminal and the west side of Broad Street.[22]

The lack of a comprehensive plan for urban food markets was no one city's fault, but it was every city's problem, according to the Chicago Municipal Markets Commission. Its preliminary report of 1914 proposed replacing the South Water Street Market with a series of wholesale farmers' markets and a new food terminal in South Chicago. The plan, however, did not go very far with farmers and merchants whose business patterns were linked physically and functionally to the urban infrastructure.[23] The radical redesign of existing marketing patterns was invasive at best, such that most plans for market terminals did not see the light of day, including the visionary Seattle Railroad and Marine Terminal Project. The conceptual plan for Seattle, designed by the New York architectural firm of John Mead Howells and Isaac Newton Phelps Stokes in 1913, would have obliterated Pike Place Market, and skeptical taxpayers derailed the project for its unnecessary grandiosity.[24]

Baltimore after the 1904 Fire: An Anomaly

While many cities grappled with the market problem and the HCL, municipal officials in Baltimore preferred to "let well enough alone," taking pride that their city had operated markets since the eighteenth century and was, in 1913, "one of the cheapest cities in the United States in which to live." Indeed, Baltimoreans benefited from location with respect to the supply of fresh local produce, owing in part to the productive waters of the Chesapeake Bay for fish and seafood. Likewise, household consumers and institutional buyers of fresh fruits and vegetables benefited from proximity to productive farmland on Maryland's eastern shore of the bay and to the Anne Arundel truck farms on the western shore. Other components of Baltimore's established food distribution system included two private rail terminals—a wholesale fruit and produce market at the Pennsylvania Railroad's Bolton freight station and another one at the Camden freight station operated by the B&O. Steamer loads of fruit, principally bananas, sold at auction at the municipal docks, where dealers, mostly local Italians, broke them down into manageable lots for resale at the markets.[25]

Complementing these outlets was Center Market, Baltimore's new municipal wholesale market built to supply the city's retail grocers and ten municipal market houses. The city built the municipal wholesale market not by any drive for food system planning but by necessity, after the great Baltimore Fire of February 7, 1904, decimated 140 acres of the city's commercial core. Exceptional was the speed by which the city built the market (due to the absence of the usual opposition from the produce trade to any proposed, optional move), its attention to architectural embellishment while keeping to a restrained budget, and compliance with modern sanitary features for market buildings. In addition to planning a new market after the fire, the city also gave priority to widening and repaving the principal streets and thoroughfares that handled the movement of goods and produce, particularly Light and Pratt Streets, which bordered the harbor basin.[26]

The story of Baltimore's swift planning and design of a new municipal wholesale market in the aftermath of the fire affirms the importance of the wholesale fish and produce trade to the city's economy and self-image. On December 14, 1904, just ten months after the fire and only days after the Center Market Commission was established under the chairmanship of General Felix Agnus, Mayor E. Clay Timanus joined the commission for an inspection of the proposed market site—the grounds formerly occupied by the Maryland Institute on East Baltimore Street. Subsequent commission meetings engaged input from the Fish and Produce Dealers Association and the Central Business Association, resulting in a final proposal for a market space three blocks long that included the Maryland Institute Night School and Retail Market Building, Wholesale Fish Market, and Wholesale Produce Market. The commission hired Simonson and Pietsch to prepare plans and cost estimates. Otto G. Simonson, born and trained in Germany, had served in Washington, DC, as superintendent of construction of public buildings for the treasury department shortly before entering a partnership with Theodore Wells Pietsch, an established American architect who had trained at the École Nationale Supérieure des Beaux-Arts in Paris. Both architects were already active in Baltimore to help with the larger effort to rebuild the city after the fire.[27]

Reacting to the plans presented by Simonson, the commission reported in its minutes of August 2, 1905, that the wholesale market buildings were "handsomely framed." Designed in the colonial revival style, the wholesale fish and produce markets were two stories in height, with symmetrical front facades, continuous cornices, and classically framed doorways topped with open pediments. Their fireproof features included tin roofs, granite foundations, and steel frame construction, while the exterior walls were faced brick with Indiana limestone trim. Simonson and Pietsch employed features that addressed the differences in handling fish versus farm produce. The wholesale fish market had a large open sales floor at ground level and reinforced concrete stairs, toilets, and offices on galleries above. Extremely high doors at both ends of the building kept the building well ventilated from fish odor—a feature, however, that later elicited complaints from vendors who were not pleased with the cold drafts (fig. 3.2). Continuous metal awnings over the side doors facilitated loading, and the market was fitted with twenty-six steel rolling doors that gave flexibility, comfort, and security to occupants

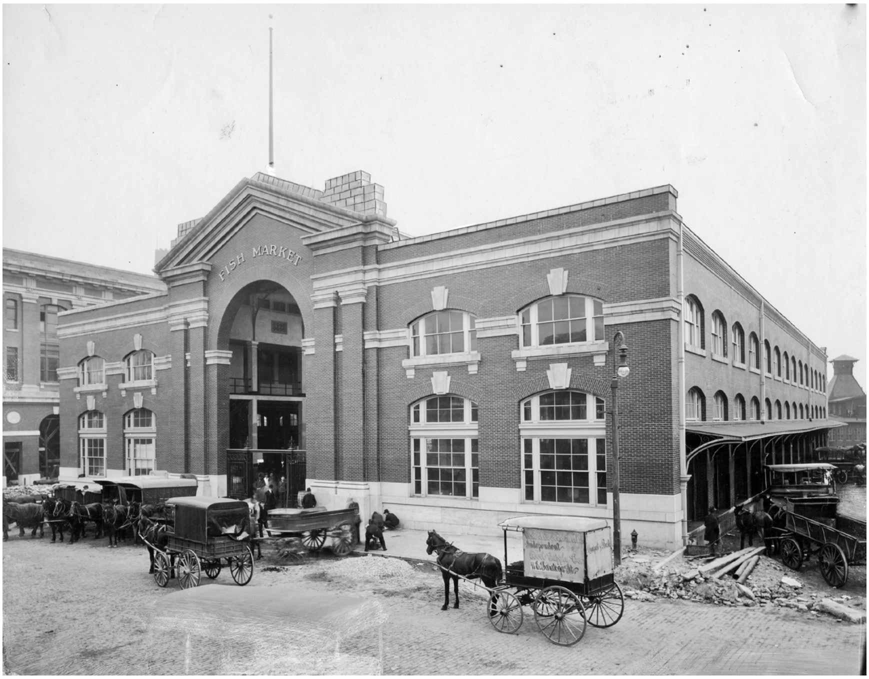


Figure 3.2. *Fish Market—Market Place, Baltimore, ca. 1908*. Henry Rinn. Undated Rinn Collection. Special Collections Department. Courtesy of the Maryland Historical Society, z24.568.

on the interior. The wholesale fish market was also equipped with two elevators to the second floor offices, as well as pipe connections to the Baltimore Refrigerating and Heating Company. The Wholesale Produce Market required some street closures in order to create an open lot for heavy local traffic, and driveways ran through the building so that teams could pass through to the open sheds in the rear—a feature employed back in the 1880s at West Washington Market in New York City.[28]

The city of Baltimore opened the new wholesale market in 1906, having designed and completed the facility in just one year. The commissioners remained active for several more years, just long enough to see it in operation and to make minor adjustments. Stall fees in the fish market were set at $400 per year. The city made slight grade modifications at Lombard Street and West Falls Avenue and added underground drainage into the nearby Jones Falls. Minutes of the commission also reported their approval of a bronze dedicatory plaque to commemorate the market, a postal telegraph service, and a drinking fountain donated by General Alfred E. Booth. Despite the commercial nature of the market, the commissioners remained steadfast in protecting its aesthetic appeal. In a city aspiring to rival others in beauty, they sent a letter to the city council on June 13, 1907, opposing the location of a public comfort station at the head of Center Market Space, "believing said location would be detrimental to health and destroy the beauty of the market buildings." Thus, Baltimore's wholesale market came to represent everything that municipal leaders and members of the trade were hoping for—beautiful buildings of solid construction with soaring ceilings and good ventilation, and uniform facilities for licensed commission merchants, who could operate under the auspices of the municipality for a nominal fee.[29]

Center Market was a place for the assembly and concentration of regional food supplies for local consumption rather than for shipment via truck or rail to other markets—a service that was rendered at the rail terminals. Selling of produce was confined to the commission merchants who were licensed by the city to do business there. Each dealer in the market specialized in a single commodity or the produce from a single county, and the producers or truckers who brought their supplies to the market usually sold through the same commission agent. These factors facilitated the functioning of the market and expedited the movement of the produce. The concentration of supplies also facilitated the combining of several truckloads into quantities desired by purchasers. For example, a buyer wishing to obtain two hundred bushels of tomatoes could do so in a single transaction with the commission merchant, instead of negotiating with multiple producers or truckers each having a limited load. This eliminated confusion, hastened the marketing of the produce, and assured each producer the full market price for his supplies.[30]

At a time when most cities considered their public markets a disgrace and food prices beyond the reach of the average citizen, Baltimore officials were proud of the city's municipal market system. James H. Preston, Baltimore's two-term mayor (1911–1919), boasted that the municipal markets contributed to the city's gastronomic good fortune. In *The Baltimore Book*, a promotional book prepared for Preston's distribution at the 1912 National Democratic Convention, the section on markets noted "the great Chesapeake Bay and the Patapsco River yield up an enormous supply of crabs, oysters, and fish. Several lines of steamers bring tropical fruits in abundance. Maryland is the home of the terrapin and the canvas-back, and Baltimore is the gastronomic center, where these delicacies are prepared and where they are consumed in large quantities." Food items considered luxuries elsewhere were available at reasonable prices, even for those of limited income. Mayor Preston held the line that the retail Lexington Market was "without a serious rival in the country," and that the wholesale Center Market was "pronounced the most complete in the world." Beneath the mayor's hyperbole, Baltimore's long history of municipal ownership of market property and structures had indeed nurtured an expertise in city hall, specifically in the office of the comptroller, the official in charge of the municipal markets. Speaking at the 1913 symposium on reducing the cost of food distribution, comptroller James F. Thrift and his deputy William T. Childs considered Baltimore the "pioneer of American cities in municipal markets." They understood that the success of its municipal markets (ten retail markets and one wholesale market) depended on an abundant supply of fresh food, for which they credited the private railroad terminals, fruit auction companies, commission merchants, hucksters, and steamship companies. Local farmers and distant producers, therefore, could find a ready market for their produce at a number of wholesale outlets right in the city; merchants at the retail public markets could readily stock their stalls with a wide variety of fresh food; and consumers paid lower prices at the municipal markets than they could otherwise find at the grocery stores. Although Thrift and Childs alluded to the nationwide movement for market reform, they defended the status quo. There was room for physical improvements to the markets of Baltimore, but they preferred to exercise more municipal oversight with the appointment of a market commissioner—a public official who would manage the markets to the same degree of oversight expected from a manager of a private corporation.[31]

The New York City Market Commission

Market planning and improvements were not so simple in New York City, which faced the biggest challenge when it came to consolidating the food trade. The nation's largest metropolis and market for fresh food fed a resident population of five million people as well as thousands of daily commuters; it provisioned outgoing trains and steamships; and it exported food to other cities and towns. Nine railroad companies and twenty-three steamship lines brought food into New York. In 1912, the Pennsylvania Railroad alone received approximately 35,000 tons of fruit and vegetables per month, as well as tons of butter, poultry, and dry goods. Most of the produce was destined for various wholesale markets, such as Gansevoort, Wallabout, or Washington Street, where commission merchants and jobbers handled the business.

The merchants, however, were a mixed blessing. They crowded markets with their bulk sales and makeshift stores, making it difficult for farmers and patrons to negotiate the streets. They also operated in outdated and unsanitary facilities whose condition had deteriorated over the decades for lack of maintenance.[32] More serious, however, they were often accused—and rightly so—of falsely reporting goods as received in bad condition, and of holding back goods in the freight yards to keep prices high. They also passed on to farmers the railroad's uncontrolled freight rates. This malpractice inflated food costs for the consumer and left little profit in the hands of the farmers.

Cyrus Chace Miller (1866–1956), borough president of the Bronx, declared that New York's answer to lower food prices were wholesale terminal markets, municipally owned and coordinated with rail, road, and water routes. This market type, Miller argued, facilitated food receipts and inspection and reduced handling costs for food headed to private retail establishments. By investing in wholesale rather than retail markets, the city would gain control over the most lucrative aspect of the trade, which, Miller argued, was otherwise in the hands of steamship and railroad companies. Miller believed that the principles of food distribution were similar to railroad passenger service, in that a unified market terminal would bring food to one place and then distribute it to various destinations. Moreover, his proposal would embrace the middleman, on whom New Yorkers depended, because consumers were too far from the food source to purchase directly from the producer.[33]

Recognizing the magnitude of needed market reform, Mayor William Gaynor appointed Miller to chair the Mayor's Market Commission in 1912. Its task was to understand the current market system in New York and make recommendations for improvement. The commission conducted an extensive investigation of market conditions through a series of public hearings, at which experts and various interest groups gave testimony on the subject. It also gathered information from numerous reports and monographs on markets in other American cities and in those abroad, as well as from firsthand accounts of European markets by select members of and advisers to the commission.[34]

A self-declared expert on terminal markets from the consumer perspective was Madeleine Black, recent widow of New York banker Elmer Black, who used her wealth, time, and education to tour the markets of Europe in her capacity as member of the Advisory Board of the New York Terminal Market Commission. Mrs. Black sponsored an architectural model of a proposed wholesale terminal market for New York City displayed in the Woman's

Industrial Exhibition at the Grand Palais in Paris in March 1913.[35] On her return to the United States, Mrs. Black devoted her time to publish and lecture on the need for new wholesale food facilities in American cities, particularly in New York, since current ones no longer served the public good. She praised Munich's new terminal market as the best equipped in the world. Its well-stocked facilities stimulated demand for fresh produce, which had the added benefit of aiding rural prosperity and enhancing the value of agricultural land. At the heart of the Munich complex were four parallel market halls constructed in reinforced concrete with cast-iron interior supports, built under the direction of Richard Schachner (1872–1936), chief of public works. Each hall specialized in the sale of specific kinds of produce, which arrived on sidings connected to the city's south railway station. Underground cellars were fitted with hydraulic lifts and electric lighting, and the market had a toll department, post office, restaurant, and beer garden. Black pleaded to her fellow citizens in New York to support a new wholesale terminal market along the lines of the one in Munich. "With wise administration, stringent inspection and sound safeguards, these municipal markets benefit both producers and consumers. They eliminate considerable immediate expense, delay and confusion. Last but not least they return a profit to the city treasury."[36]

The Mayor's Market Commission concluded that New York's most pressing need was a wholesale terminal market in each of the five boroughs, beginning with one in the Bronx. An illustration drawing prepared by architects Elisha H. Janes and August W. Cordes reproduced in large format as a foldout in the 1913 commission report shows a comprehensively planned industrial complex located on a large tract along the Harlem River between 149th and 152nd Streets. The principal features of the plan were market buildings for fish and poultry situated on piers, a long railroad spur to connect with private railroads, and a vast complex of cold storage warehouses, administrative offices, wholesale stores, and auction houses. The design emphasized the horizontality and expansiveness of the site, whose location would be marked from a distance by a clock tower. It also reinforced the contemporary desire for a visual coherence of activities that took into account various modes of transportation and types of sales. The proposed Bronx Terminal Market would consolidate food storage and inspection, link food distribution to all modes of transportation including the subway, and cost approximately $10 million for plant and property. Initially unhampered by cost constraints, the design was visionary and represented a complete break from the nineteenth-century produce district. The proposal was ambitious, and reformers considered it the most progressive step ever taken in the history of New York toward a final and complete solution to the food problem.[37]

The grandiose plan required immense tracts of land, an opportunity quickly seized upon by speculators and developers who also promoted the terminal market mantra. In 1912, during the height of the commission's investigations, the 1912 *Real Estate Record and Builder's Guide* repeated the widely held claim that "the principal local causes of high-priced food are defective arrangements for the reception and distribution of food products. The terminals of the port [of New York] are badly arranged and local transportation is based upon conditions which have outlasted their usefulness."[38] Chairman Miller remained cautious and realistic—recognizing that any change to current conditions and practices would be difficult to accomplish by the municipality acting alone. In his address at the New York State Conference of Mayors in Binghamton, New York, on June 6, 1913, Miller announced that marketing was finally getting the attention of the federal government, which established the Office of Markets "but a few days ago." He welcomed the support, for he realized that "in these days of quick communication, refrigeration and improved freight service, many of the forces that influence prices are nation-wide in scope and cannot be influenced by

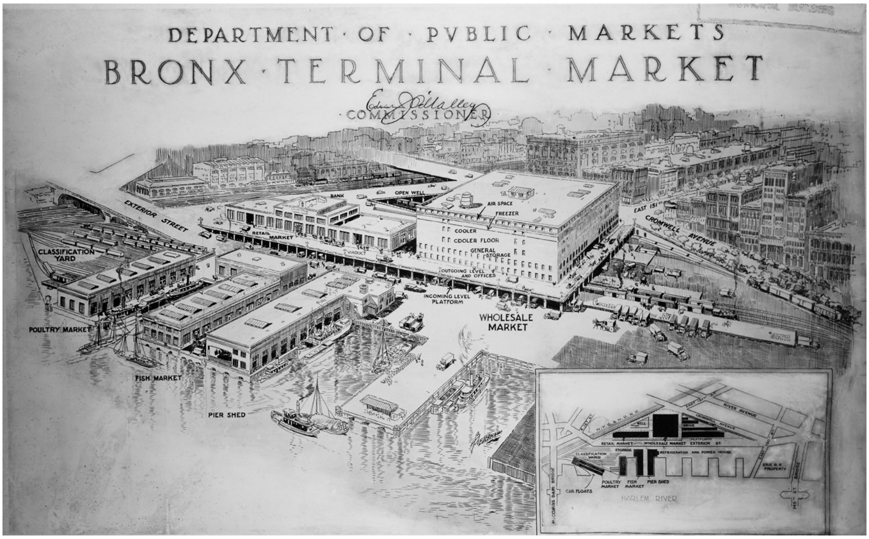

DEPARTMENT · OF · PVBLIC · MARKETS
BRONX · TERMINAL · MARKET
Edwin J. O'Malley
· COMMISSIONER
BANK
OPEN WELL
AIR SPACE
FREEZER
COOLER
COOLER FLOOR
GENERAL STORAGE
OUTGOING LEVEL AND OFFICES
INCOMING LEVEL PLATFORM
WHOLESALE MARKET
EXTERIOR STREET
RETAIL MARKET
VIADUCT
CLASSIFICATION YARD
POULTRY MARKET
FISH MARKET
PIER SHED
EAST 151
CROMWELL AVENUE
RIVER AVENUE
WELL
DRIVE
PLATFORM
RETAIL MARKET
WHOLESALE MARKET
EXTERIOR ST.
STORAGE
REFRIGERATOR AND POWER HOUSE
CLASSIFICATION YARD
ERIE R.R. PROPERTY
POULTRY MARKET
FISH MARKET
PIER SHED
CAR FLOATS
HARLEM RIVER
McCOMBS DAM BRIDGE
149th ST. BRIDGE

Figure 3.3. *Proposal for the Bronx Terminal Market, New York City Department of Public Markets, aerial perspective, between 1919 and 1927.* Courtesy NYC Municipal Archives.

any local action we might take." However, New York's plan to finance and construct a system of new food terminals, or even just one in the Bronx, took several more decades to achieve (fig. 3.3).[39]

The USDA Office of Markets

A big boost to municipal market reform came on May 16, 1913, when agriculture secretary David F. Houston appointed Charles J. Brand as chief of the new Office of Markets, with an initial appropriation of $50,000 from Congress. The overall mission of the office was to acquire and diffuse information on the nation's methods of marketing and distributing farm produce. Brand had already been working in the USDA on standards and grades for cotton and grain, so he was well qualified to turn the agency's attention to developing standards and grades for produce. The office also studied terminal market projects, the producer cooperative movement, and current methods and costs of food distribution. It planned to survey local supply and demand, assist producer organizations with securing suitable transportation facilities, and manage a market news service for perishable produce. Brand emphasized that the work of the office would "be definitely practical, and, though founded on sound economic bases, not academic."[40]

The Office of Markets went into action quickly with the "City Marketing and Distribution Project," headed by chief marketing investigator George V. Branch and assistant market investigator Achsah Lippincott. Their goal was to build a team of investigators to survey cities across the United States and follow up with written reports on existing marketing facilities, weaknesses, and recommendations for improvement.[41] The agency was the perfect arbiter for cities that needed an objective evaluation. In October 1913, five months after the Office of Markets was established, Hanford Crawford, chair of the Public Markets Committee of the Civic League of St. Louis, invited Branch to conduct a thorough investigation of the city's four municipal markets (Union, Biddle, Soulard, and South).[42] The Civic League had been concerned about the decline of business, which it attributed to expansion of the city, the activities of unscrupulous dealers, increased rail traffic in produce, and a growing demand for home delivery. Leaders in St. Louis welcomed any advice they could get from the federal government, since they recognized that "the problem is enormous and complex, involving a score of factors—such as railways, interurban, motor truck and farm vehicle administration, cold storage, wholesaling and retailing, the administration of public markets, sanitation of markets, the commission-dealer, the huckster, push-cart vendor, weights and measures, and the market customs of the community." Branch recommended the establishment of a municipal markets department and the repair of city markets already in operation, specifically Soulard and Biddle. He called for remodeling them with concrete floors, tile and glass counters, refrigerating facilities, and paved open marketplaces with covered steel sheds. Sanitary conditions at the Union Market were "intolerable." Speaking as an easterner, he advised the city to adopt the huckster and pushcart systems, for they reduced waste and cost by providing quick merchandising outlets for perishables. Branch finally concluded that St. Louis also needed a wholesale market for local produce.[43] Within a year, more than four hundred farmers and gardeners formed the St. Louis County Producers Market Company; they purchased an eight-acre tract of land for $145,000 near the geographical center of the city, but some distance away from the congested Third Street commercial district.[44]

The year 1915 marked the transition of the Office of Markets from primarily a research agency to a regulatory and service agency, when the USDA reorganized it into the Office of Markets and Rural Organization.[45] Scientific and clerical staff increased 164 percent, from 83 employees in July 1914 to 219 in July 1915, during which time the agency had completed surveys of existing marketing facilities in fourteen cities: Cleveland; Detroit; New Orleans; Kansas City; Denver; New York; Dubuque and Des Moines, Iowa; Madison, Wisconsin; Norfolk, Portsmouth, and Richmond, Virginia; and Newark and Paterson, New Jersey. The office also surveyed cities that were interested in establishing new municipal marketing enterprises, either wholesale or retail: Rochester, New York; Huntington and Parkersburg, West Virginia; Jersey City, New Jersey; Hartford, Connecticut; and Lynchburg, Virginia.[46]

Surveys took into account the new principles of scientific management, in which the nation's food marketing and distribution system, from farm to table, was broken down into small components in order to isolate and indentify the problems. Even the agency as an organizational structure of its own had internalized faith in time and motion studies and the quest for efficiency. Chief Brand made a point of mentioning in his annual report of December 1914 that the Office of Markets moved into a new building that made "it possible to harmonize the physical location of staff with its logical organization, with a consequent increase in efficiency of administration and decrease in waste motion."[47] Dovetailing with the investigative work of Branch and Lippincott on city markets was that of George C. White, specialist in charge of transportation of farm products. White's division devoted its energy to designing improved terminal and transportation facilities, aiding shippers in securing proper car supply, studying minimum carload weights in order to overcome car shortages, and designing improvements in car construction. More specifically, it observed the desired features and the defects of transporting perishables in iced or ventilated cars, special market trains, and suburban and interurban freight and express; storage and warehousing problems were also studied, together with their bearing upon prices, supply, and demand.[48]

The USDA Market Typologies

The USDA published the results from the agency's initial investigations in a separate yearbook circular that spread the message that wholesale terminal markets were essential components of an efficient food marketing and distribution system for cities. Branch, in *Retail Public Markets*, warned against the construction of too many neighborhood retail markets, since food shoppers preferred the large central market because of its assortment of produce and proximity to the shopping district. Farmers also bypassed the smaller markets to sell downtown, where a greater concentration of buyers were present. Branch recommended that cities invest in protective steel sheds for farmers, located in designated streets or lots in proximity to the central markets. He also noted the success of Berlin's municipal wholesale market, where licensed agents who sold at auction or by private sale were required to report their transactions to the city authorities and to publish prices in an official market bulletin.[49]

Branch described the components of a terminal market in his lectures. In "A Practical Market System for Our Large Cities," he emphasized that "those engaged in the fruit and produce business almost unanimously voice the demand for one union terminal where the business will be brought together." He explained that in its model form a wholesale terminal market should consist of several sectional buildings located on "a well-designed sanitarily-constructed tract market space," where produce could be unloaded directly from cars onto receiving platforms in a warehouse subdivided and rented to wholesale and commission merchants. Handlers would then reload the produce onto buyers' wagons backed up at the rear of the stores. Warehouses should be equipped with a sales area for produce auctions, as well as storerooms, offices, and cold storage. Second, "for the good of all concerned," a wholesale farmers' market should be part of the terminal plan. This would consist of protective sheds on the site, reserved for local growers. The wholesale farmers' market would put growers in contact with the buying trade of the city, and it would serve as a convenient place for assembling and shipping carlots of local produce to better markets in times of glut.[50]

Branch emphasized that a well-designed terminal market should provide equal access to all common rail carriers, preferably by way of a belt line to serve multiple railroad companies—the cost of which would pay off in the end. As Branch explained to his lecture audiences, municipalities should direct their resources toward "first-class marketing facilities at a low cost, so that both producers and the middleman can carry on the business of retail distribution at a minimum overhead expense." In this way, a good municipal terminal market would supply all outlets in the city and region, thus eliminating the need for more retail public markets.[51] He cautioned, however, that despite the promise of terminal markets, there remained at least one more important problem to solve, namely, a better way to connect the terminal market to the retail marketplaces. Branch encouraged the use of interurban and city trolley systems as package freight carriers during the earlier morning hours, for cheap and efficient alternatives to trucks or wagons. Additional switches along the receiving platforms of retail public markets and near jobbing districts throughout a city would enable products from the wholesale terminal market or produce district to be unloaded from cars without interfering with other traffic.[52]

The study of existing and proposed marketing facilities immersed Branch into questions of building design and engineering, and for that, he requested additional staff, including the services of an architect.[53] Rufus McClellan Beanfield, a structural engineer from California, joined the project staff in 1916, in order to make "a study of the best types of market architecture and general design, as well as the efficiency of the different kinds of mechanical equipment now in use."[54] Beanfield developed generic designs for model markets, both wholesale and retail, incorporating into them the most desirable features he had observed in existing markets. One plan titled "Suggestions for Structural Steel Open Sheds, One and Two Column Types, for Open Markets" reinforced graphically the options promoted by the USDA. A shed with a single row of columns down the center protected two lines of farm wagons and trucks facing opposite directions. A Two Column Type enabled farmers to back up their vehicles to a row of columns on either side of the shed, leaving a pedestrian way down the center. Having observed the handling of perishables at the Pennsylvania Railroad produce yards in Pittsburgh and Washington, DC, Beanfield also developed generic plans for wholesale produce markets that factored in the receipt of produce by rail and wagon to a single site equipped with cold storage, auction houses, and wholesale stores.[55]

Congressional support for the Office of Markets and Rural Organization grew exponentially with increasing appropriations: $484,050 in 1915; $872,590 in 1916; $1,718,575 in 1917, when the USDA reorganized the Office into the Bureau of Markets; $2,023,255 in 1918; and $2,811,365 in 1919. With steadily increasing funding and public support, the Bureau of Markets continued to promote modern wholesale produce markets with an aggressive campaign of public lectures, educational exhibits, publications, market reporting services, and model designs for buildings and equipment.[56] Following in the tradition of earlier reform photographers such as Jacob Riis, the agency was the leader in capturing images of extreme cases of unsanitary market buildings, congestion around the marketplace, and improper methods of shipping perishable produce. Other documentary photographs traced the journey of food products from the farm to the consumer, in order to identify sources of waste and to record unnecessary steps in handling. USDA staff photographed the problems associated with nonstandard baskets and crates, the hoarding of food products, the "evils" of the credit system and telephone ordering, and poor accounting practices, particularly among wholesale fruit distributors.[57]

Horace C. Wilcox, chief photographer in the Bureau of Agricultural Economics (BAE) photographic laboratory, oversaw film processing and the immense photographic archive of markets and marketing subjects taken by USDA staff photographers since 1913. Wilcox also produced duplicate negatives and copy prints made from photographs that the agency secured on loan from other sources. The development of cheap halftone reproduction techniques ensured wide dissemination of the bureau's visual resources to congressional committees, city planning officials, trade organizations, reform agencies, the extension service, and the press. Although the USDA does not come to mind as an urban chronicler, its marketing specialists in the early decades of the twentieth century systematically documented city marketing conditions in all of the states—and with the same fervor that historians of photography have given credit to photojournalists and commercial photographers. Like their counterparts in the public domain, the USDA photographers in the service of marketing reform considered photography an integral tool in the investigative process.[58]

In addition to photography, the Bureau of Markets pioneered motion picture technology in the documentation of urban markets. Achsah Lippincott, writing from Lancaster, Pennsylvania, to her bureau chief on November 9, 1917, asked: "How about spending one or two days in New York City to photograph one of the busy docks and wholesale sections as well as some of the East Side market characters that would add interest to the film? It would seem that we ought to show a glimpse of the feeding of our largest city." Lippincott was in the heart of Amish country with George R. Goergens, a USDA cinematographer, for a film shoot of the Lancaster Central Market. A few days later, Branch sent a telegram to her while she was on a shoot in Philadelphia, instructing her "to return to Washington immediately" to film the markets of Wilmington and Baltimore.[59] The film, *To Market! To Market!*, neatly summarized the bureau's model market system—one that proposed a curb market, farmers' wholesale market, or enclosed retail market, depending on the size of the city and local conditions. It opens with scenes at the simplest type of market—the outdoor market, or retail curb market, where Amish farmers are selling direct to cash-paying customers. Next are scenes of a farmers' wholesale market. An intertitle describes it as "more business-like than the retail curb market. . . . One city has a ten-acre paved tract, improved with sheds and administrative buildings, set aside for a farmers' wholesale market." Failure to provide special spaces for farmers, adds another intertitle for a congested market scene, forces farmers to use the city streets, causing traffic jams. The film concludes with a third type of market, "made up of stalls and booths in a building. . . . Many market houses are old and dilapidated. . . . Others are modern in every sense." The latter depicts Cleveland's new West Side Market, praised not only for its architecture but also for its sanitary features, including protective food displays.[60]

The film and still-picture archive provided material for traveling exhibits at agricultural fairs and meetings of various farm organizations. Off to a strong start, the Bureau of Markets produced visual aids of exceptional quality and quantity (photographs, film, maps, architectural drawings, and graphs), which were fundamental to its work and mission. Their portability, mass distribution, and educational benefits were enduring, and these material resources came to form the core of the bureau's legacy.

The Bureau of Markets, primarily a service agency in its early years, tackled market reform and the HCL not only with advice on physical facilities but also on ways to improve the actual business practices of the still-nascent produce trade. Granted that growers, shippers, wholesale dealers, and retailers kept themselves informed of current market prices through trade journals and daily price reports, the bureau developed a more durable and powerful tool with its Market News Service. Established in 1915, the Market News Service provided the trade with free, unbiased data on price, volume, quality, and condition of agricultural commodities issued daily and periodically by telegraph, telephone, and mail. Wells A. Sherman directed *The Daily Carlot Shipments and Jobbing Price Reports of Fruits and Vegetables*, the *Weekly Summaries of Carlot Shipments*, and the *Weekly Market Reviews*. This service put bureau staff in direct contact with the trade throughout the entire country. In 1917, the USDA maintained permanent branch offices of the Market News Service in Baltimore, Philadelphia, New York, Boston, Buffalo, Pittsburgh, Cincinnati, Chicago, Minneapolis, Denver, Kansas City, and St. Louis, and another twenty cities were represented by members of the trade who sent temporary carlot shipment reports to the bureau for tabulation and dissemination. Added to this were approximately 10,000 station agents giving voluntary service as reporters of daily shipment reports on approximately 225,000 miles of railroad. In 1917, the bureau distributed more than 3,000,000 Market News Service bulletins to more than 52,000 individuals.[61]

Describing the Market News Service in the developmental years, Sherman made the point that initially, private reporters at city markets wired wholesale prices to distant shipping points and received special rates and transmission preferences from the federal government in exchange for filing duplicate messages with Washington and the field stations. The role of the federal government changed quickly after the early discovery of the inability of the telegraph companies "to assemble quickly at remote country points a number of difficult messages from different sources." Sherman noted that it was far more economical and efficient for his service to compile, edit, and transmit a single comprehensive report at a given hour of the day to members of the industry, and it could do so faster than anyone could from a field station. The field stations were often limited to a single wire, over which they sent an excessive number of "unusually long telegrams with many figures." Within three years, the Market News Service leased "the most extensive telegraphic facilities controlled by any patron of the Western Telegraph Company, with the exception of those leased by the Associated Press," and "necessity thus led to the clearing of all reports through Washington."[62]

George V. Branch developed the *Daily Market Reports on Locally Grown Truck Products* for cities with centralized wholesale farmers' markets. The

Providence Market Gardeners' Association inaugurated the service in Providence, Rhode Island, on May 1, 1917, at the behest of Branch, who encouraged the group to hire someone whose sole business was "to gather and disseminate information in regard to the supply of home grown vegetables and prices paid." Early each morning, the agent made his rounds at the wholesale farmers' market and listed the total quantity of each product offered for sale. By five o'clock in the morning, he posted the list on a central bulletin board, where producers and buyers would have an accurate knowledge of the day's supplies. Built on the principle that the law of supply and demand governed price, the daily market reports posted at an early hour helped buyers and sellers to agree on fair price bases for the day. They also had the added benefit of delaying any sales until the list was available, for the grower feared that he would sell something short, or at too low a price. Likewise, the grocer feared that he would buy something that was in heavy supply at too high a price. After the Providence Market News Service had exceeded expectations, the bureau decided to expand the service by entering into cooperative agreements on market reporting with local truck growers' organizations and with municipal governments at Boston, Springfield, St. Paul, and Denver.[63]

The USDA Bureau of Markets was directly involved in other business practices of the produce trade. Representatives worked in the field to study the uniform accounting codes drafted by the Fruit Growers' Agency, a consortium of shippers from the Pacific Northwest. They surveyed eight fruit shipping firms in order to ascertain the average cost of operating fruit packinghouses and warehouses. They also cooperated with accounting committees appointed by the National League of Commission Merchants and the Western Fruit Jobbers Association in an effort to perfect a uniform system of accounts. The bureau's work on fruit and vegetable grading, standardization of grades and packages, market inspection, storage, and the study of perishable produce in transit put them in good standing with leaders in the trade who welcomed guidelines and protection.[64]

The Bureau of Markets confronted reform with neutral tactics that kept intact the old wholesale districts, welcomed farmers to convenient locations in the city, and encouraged the preservation of beloved city retail markets by offering remodeling advice. Its approach was technological, architectural, practical, and noncontroversial, and its inclusive strategy earned it favor with agricultural economists and members of the produce industry. Edwin Nourse, biographer of the Chicago produce market and by this time professor of economics at the University of Arkansas, declared that "the sanity of [the bureau's] viewpoint and the thoroughness of their methods have won the respect and support of producers and traders alike"—a reputation that served the bureau well into the decades to come.[65]

Open Markets and the Terminal Rebuttal

An important resource for the Office (later Bureau) of Markets was an extensive bibliography compiled by Charles C. Williamson, librarian of the New York Municipal Reference Library. First published in the *Report of the Mayor's Market Commission of New York City* (1913), then expanded and reprinted with permission in *Summary of the Market Situation in Boston* (1915), the bibliography boasted approximately four hundred citations, including foreign language sources, to the latest scholarship produced in the United States, Great Britain, Continental Europe, and Australia. Sources ranged from technical studies, scholarly tomes, government documents, and newspaper articles, to popular articles, books, and conference proceedings.[66]

For all of its breadth of coverage, the bibliography of the 1915 Boston report credited James Sullivan's *Markets for the People* (1913) as one of the most widely known of the recent volumes on the public market question. Sullivan had a popular appeal for his direct argument that New Yorkers did *not* need the $10 million wholesale terminal market that Cyrus Miller proposed to the Mayor's Market Committee. Instead, Sullivan promoted a practical, immediate, and cost-efficient means of connecting the producer to the consumer: the open market—sometimes referred to as "free market," "curb market," or what today is called a "farmers' market." He formulated his conclusions in 1909, when he joined Samuel Gompers, president of the American Federation of Labor (AFL), on a European tour that gave him an opportunity to visit public markets, collect official reports of their operations, and gather popular views regarding them from labor representatives. Sullivan continued working with Gompers as his assistant editor over the next few years, managing "literally a stream of printed matter on the subject" of public markets that arrived from all over the world to the editorial offices of the AFL in Washington. Sullivan developed a personal interest in the topic and returned to Europe in 1912 to visit the principal markets of Switzerland, followed by an in-depth tour of Paris, London, and Berlin—cities whose scale and conditions Sullivan found equal to that of New York. He admired the great popularity of large outdoor markets where wage earners could purchase food that was more fresh and affordable than they could find in the market houses. In *Markets for the People*, Sullivan argued: "New York can have at once a public metropolitan market system, employing the cheapest methods of retailing, without spending a dollar for plant. The system is the one which has surpassed on trial all other public forms of marketing in the great cities of Europe. The plan herewith recommended is simple, direct, practical, costless." The system of open-air markets "is at once the most ancient and the most modern. It is the cheapest of all systems—efficient, natural, democratic, rightfully communistic."[67]

Sullivan proposed three kinds of open markets for New York City—*open* in the physical and regulatory sense. Ambulant street vending would be free to anyone and limited in range only by necessary health laws. Open-air markets would be held two or three times a week in public streets, parks, or spaces—again, free to all vendors of foodstuffs or manufactured articles of household or personal use. Lastly, the city could upgrade existing public markets in order to accommodate the latest in modern methods of food marketing. These methods would include auctioning, licenses for commission men, sales by sample, ordering from the producer for direct delivery, and free parking and other enticements that encouraged the attendance of local producers.[68]

Sullivan's promotion of open markets took hold in the borough of Manhattan, where most food marketing and distribution activities were outdoors anyway—at the railroad yards, waterfront, streets, and farmers' markets. A major backer was Marcus M. Marks, the borough president, who supported the establishment of four open markets to initiate the program (under the Manhattan Bridge, East Broadway and Market Street; at Queensboro Bridge, First Avenue and 59th Street; at Harlem Bridge, 129th Street and Third Avenue; and at Fort Lee Ferry, 130th Street and Hudson River). Each market used existing infrastructure to accommodate farm wagons and pushcarts and had electric lighting and other facilities as needed. Vendors exploited the anti-middleman sentiment with stall signs that read, "We sell retail at wholesale prices." The publicity was immense. The New York City Car Advertising Company placed free market advertising placards on all of its streetcars in New York City and in sections of Connecticut, New Jersey, and New York State within commuting distance of the city. Placards in the Italian and Jewish sections were printed in Italian and Yiddish, and the company advertised the markets on the Long Island Railroad. The Motion Picture Exhibitor's Association participated by advertising the opening of the markets with slides projected at two hundred local theaters.[69]

Marks also chaired the Committee on Markets and requested that fellow committee member S. Walter Kaufmann, a German-American lawyer on

Wall Street, visit open street markets in Germany. Kaufmann made his tour in the summer of 1914, returning to report that “no matter how large or how successful the large market halls may be in these cities, the selling by the producer direct to the consumer goes on.”[70] The Committee on Markets, in its final report, referenced Europe as a model for operating direct marketing channels that had proven successful without the need for expensive buildings and facilities. The committee recommended greater freedom for pushcart dealers, who could serve businesses and factories at lunch hour and housekeepers at all hours. It encouraged the establishment of open-air markets in the suburbs. It preached tolerance of private chain stores as healthy forms of competition and as shopping alternatives for the well-to-do. It discouraged construction of new municipal retail market buildings. Lastly, the committee advocated improvement in the wholesale trade by expanding the auction system, regulating the commission men in the market houses, and encouraging producers to ship direct to the markets.[71] In 1916, Jennie Wells Wentworth spoke before the American Association for Promoting Hygiene and Public Baths and praised Marks for his “historic venture into the field of free open markets” for the people of New York City, especially on vacant lots in the poor neighborhoods.[72]

The notion that open markets were more likely to combat the HCL than could terminal markets reached far beyond New York City. Nationwide, labor leaders and consumer advocacy groups touted their benefits, recognizing their successful implementation in other parts of the country. Mayor Henry Kniffke, of Dubuque, Iowa, informed Clyde Lyndon King, professor at the Wharton School of Finance and Commerce at the University of Pennsylvania, that the success of the municipal farmers’ market in Dubuque was longstanding. “Now, with you [King] the main question is how to establish such a market. That is a matter of education of both the grower and the buyer. Here [in Dubuque], through generations it has been bred into the entire population.” The advantages were many: the dealer had little expense for rent, fixtures, or help; surplus produce supplied the city’s grocers, shippers, and “home bargain hunters”; produce was fresh, varied in season, and affordable; and prices for the consumer did not bear the cost of freight, refrigeration, crates, boxes, or the middleman. Kniffke attributed the culture of open markets in Dubuque to “quite a number of German farmer immigrants, and also a liberal sprinkling of French farmers,” who brought with them “the idea of a public market” when they immigrated to the prospering lead-mining town in the nineteenth century. This prosperity spawned a large consumer class among the owners and employees of the mines, buyers "who had money and were willing to pay for fresh fruits, meats, and vegetables."[73]

Labor organizations and women's groups were particularly instrumental in spreading the idea that open markets were logical additions to the existing food system. In 1912, John Mitchell, member of the executive council of the AFL, presented a talk on the subject in Topeka, Kansas, citing the positive experiences in Des Moines and Indianapolis. The concept grabbed the attention of the Topeka women's clubs and the farmers from Shawnee and Jefferson Counties, who petitioned the city to establish one.[74] The *New York Times* reported on the similar happenings in Pittsburgh, where marketing clubs forced the city to establish an open market on Monongahela Wharf, where they could purchase live animals, inexpensive cuts of meat, and local produce direct from the source. On June 15, 1912, hundreds of women with market baskets in hand headed by automobile or streetcar to the new market, where farmers and truck gardeners awaited their patronage. The female organizers made buttons for the farmers that identified them along with the address of their farms. Mrs. John S. Flannery, president of the Federation Clubs, called on women to tolerate the discomforts of going to the wharf for their food shopping, where they could "beat the middleman and deal directly with the producer." Their persistence led the city to construct a protective shed on the crest of the sloping levee in 1915. Modest in comparison with the monumental commercial buildings on the wharf, the market shed nonetheless embodied the municipality's commitment to providing the household consumer with access to food marketing on the waterfront.[75]

On the West Coast, a Los Angeles city council ordinance of April 19, 1913, launched an open market system, with eleven of them opening in October of that year. The Municipal Market Department of Los Angeles promoted the system with fliers that were widely circulated in the residential districts, welcoming "Mr. and Mrs. Producer and Mr. and Mrs. Consumer" to attend the markets free of charge, stating that "an old-fashioned market-basket" was available to each purchaser as a souvenir. At the end of their first season, the Los Angeles open markets had attracted 13,439 vendors, half of whom were producers or their representatives, and served approximately 175,000 patrons. The total start-up cost was insignificant: $2,381.55 for basic equipment, temporary sheds, and comfort stations.[76]

With the United States' entry into World War I, open markets gained traction as an inexpensive and expeditious mode of getting farm produce direct to the city dweller. The United States Food Administration (1917–1920), headed by Herbert Hoover, promoted “curb markets” in an effort to stimulate consumption of local produce, so that other food products could be directed to the war effort in Europe.[77] Open markets, however, failed to improve the situation for meat, dairy products, and other groceries consumed year-round. In 1917, with the HCL still in the news, an angry mob of five thousand New Yorkers, mostly women and children, marched on the Waldorf-Astoria Hotel to demand affordable food.[78] Citywide arrests ensued, but the wave of protests and food boycotts continued for weeks. Many people, including President Woodrow Wilson, blamed the price spiral on wartime speculation and other illegal trading practices in the food business. New York State senator Wicks called for elected officials to go after the “wizardry of trading in New York City,” referring not to Wall Street but rather to the speculative wholesale trading in chickens, potatoes, and onions.[79]

Two new agencies thrived in this political climate. A state law established the New York State Department of Farms and Markets in 1917, which consolidated the former departments of agriculture, foods and markets, weights and measures, and the cold storage administration carried out by the state health department. In the same year, New York City established its first Department of Markets, which had complete jurisdiction and management of all public markets owned by the city. Although the department had the authority to establish wholesale markets, terminal warehouses, and cold storage plants, its wartime activities focused on coal and milk distribution.[80]

Limited Brick-and-Mortar Projects

In the immediate postwar years, the market departments of New York City and New York State periodically revisited terminal market plans, but they took no action while trade representatives voiced opposition to government involvement in the business. On the revived plans for new terminal markets in New York City, Victor K. McElheny Jr., president of the Fruit Auction Company, saw no point in relocating firms from the established produce districts “to go to these Municipal piles of brick, mortar and steel.” Moreover, he feared giving the municipal government broad powers to build markets. “What possibilities of jobs!” he declared. “What possibilities of the waste of State and City moneys! What possibilities of increasing State and City Taxes! What possibilities of teaching old-world bureaucracy something new as to State regulation and Government parentalism! And all to no purpose!!” McElheny was of the camp that government-sponsored food marketing and storage facilities amounted to socialism, and warned that food prices would only increase.[81]

Besides the negative publicity, the greatest obstacle to a terminal market plan in a city such as New York, whose wholesale businesses were well established, was the fact that food marketing and distribution patterns had settled into the urban infrastructure, rendering it difficult to rally merchants and suppliers behind a costly and ambitious relocation scheme. Most food transactions still took place at Washington Market in lower Manhattan, as well as at other wholesale districts in the city.[82] Even Bush Terminal, the private rail-marine terminal development on the Brooklyn waterfront, though designed to help improve the city's marketing and distribution of perishable food, soon turned its attention to handling nonperishables, with the exception of bananas and potatoes.[83]

Eugene H. Porter, commissioner of the New York State Division of Foods and Markets, stated succinctly why the establishment of new terminal markets—not just in New York but throughout the nation—was not immediately possible. As he explained, "many beautiful plans have been drawn, mainly by idealists," but many obstacles stood in the way. To name a few, he noted "the difficulty of securing unity of action in the great wholesale associations, the real estate interests involved, the uncertain attitude of city governments, [and] the tremendous expense involved in any proposed change." Porter also attributed the more general problems of food distribution to a lack of consensus on terminology. "You speak of municipal and farmers' markets," Porter wrote in his agency's monthly journal. "What do you mean by those? What do you call a farmers' market and what is a farmers' market? The variation and multiplicity of terms illustrates the uncertainty of definite knowledge of what markets may be." Porter also recognized that not everyone agreed on who should establish markets. Some people "think that the railroads should establish markets; others think the State ought to establish them." Porter believed that while the states might provide support for construction of markets, ultimately the cities would have to operate them.[84]

Ultimately, both the public and private sectors shelved or abandoned their terminal projects during the war, when prices for labor, structural material, and equipment rose to high levels. One exception, however, was Los Angeles, where the "Bush Terminal of the Pacific Coast" had gained enough traction before the war to see it partially complete in 1917.[85] Its origins went back to 1909, when the Los Angeles Union Terminal Company, backed by the

Southern Pacific Railroad and the Pacific Electric Railway, secured land for a terminal that promised to be so big that it would take away from Les Halles in Paris the title of "largest market on earth." It took years to clear and excavate the site, attract investors, and organize a company, so that only a portion of the market opened by 1917, including a paved yard, two hundred feet by thirteen hundred feet, for farm trucks and wagons to unload their produce.[86] Although the majority of the tenants at the Los Angeles Union Terminal Market were produce dealers, the buildings also supported light manufacturing and services. Other tenants included the Walnut Growers' Association plant, a basket and crate factory, a cold storage firm, the Produce Exchange of Los Angeles, Western Union, a hotel for farmers, and several restaurants. Louis M. Cole, a representative from the United States Food Administration, presided at the official opening of the terminal on May 11, 1918, and congratulated the many nations involved in the enterprise, especially Japan. Representing the American ally was His Imperial Japanese Majesty's Consul, the Honorable Unojiro Oyama, who delivered a speech about the important role that the Japanese played in the California produce business.[87]

Despite its partial completion, the facility already had most of the physical features of a modern wholesale terminal market and was capable of processing, storing, and distributing produce from one of the nation's richest agricultural areas. The terminal buildings were steel and reinforced concrete construction and arranged around a large open lot that anticipated the importance of motor vehicles in the movement of perishable freight.[88] Irving T. Bush brought his experience and expertise from his rail-marine terminals in Brooklyn and served as engineer for the Los Angeles project. The market building measured 1,541 by 40 feet and contained 430,547 square feet of floor space, and the warehouses offered an additional 1,770,000 square feet of storage.[89] Its engineers considered the load factor of the floors so that it could handle heavy equipment such as bake ovens; other features relieved dealers of the inadequate facilities to which they had grown accustomed in the old produce district. The market yard had a drainage system that fed reservoirs for fire pumps, while cork flooring insulated the cold storage rooms. The terminal was also equipped with an on-site service station, where motor truck operators could refuel, get flat tires repaired, and purchase automobile accessories. Dealers had the option of signing leases with terms ranging from one month to fifty years, with the shorter leases intended to provide an opportunity to test out the location.[90]

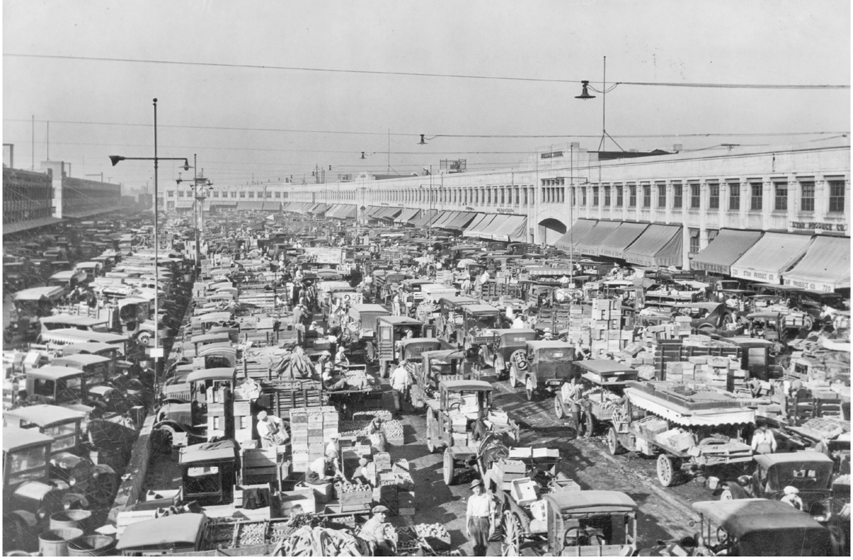


Figure 3.4. *Produce Market and Wholesale Terminal, Los Angeles, 1927.* Los Angeles Public Library Photo Collection.

Given the scope of the Los Angeles market and its potential as a model for other large cities, the USDA Bureau of Markets located a field office onsite, where it studied its operation, enforced its regulatory functions, and reported produce news and prices back to the headquarters in Washington.[91] Over the next several decades, the terminal company added more buildings to the site—making the Los Angeles Union Terminal Market an important supplier for the city's vibrant retail food trade, which ranked third in volume of business, behind automotive and general merchandise (fig. 3.4).[92]

Federal Oversight Guaranteed

The demands of wartime mobilization imposed unanticipated duties on the Federal Trade Commission (FTC) and shifted agency resources away from antitrust proceedings against the meatpackers to more broad economic regulation along the lines of other agencies such as Bernard Baruch's War Industries Board and Herbert Hoover's Food Administration. This arena extended FTC focus beyond beef and to a more comprehensive look at food distribution more broadly, since chain stores such as the Great Atlantic and Pacific Tea Company were beginning to demonstrate a consolidation in retailing and distribution. In this political and economic climate, the FTC turned its attention to an investigation of major produce terminals, wholesale markets, and cold storage warehouses, including not only the Los Angeles Union Terminal Market but also the wholesale markets in New York, Boston, Pittsburgh, Chicago, St. Louis, Memphis, Charleston, and New Orleans.[93] In its final report to President Wilson in 1919, the FTC cited a long list of problems endemic to wholesale marketing in virtually all lines of food products. The problems ranged from ignorance and negligence, to greed and disreputable business practices, and everyone along the marketing chain was to blame, including the farmer, packer, shipper, commission man, jobber, and retail dealer. Sweet potatoes and green vegetables, such as peas and asparagus, were boxed and loaded onto railcars too soon after harvesting, causing them to "sweat" and rot before reaching their final destination. Likewise, the soft fruits, such as peaches, plums, apricots, pears, and cherries, suffered damage when overloaded in cars. Rail shipment of eggs resulted in heavy losses due to inferior packaging, mishandling in transit, car shocks, and poor refrigeration or ventilation. Losses also occurred if there was a shortage of proper rail equipment. Potatoes, for example, best shipped in specially designed slatted cars, would rot if shipped in a cattle car. Although there was an informal trade understanding that a 2 percent loss or shrinkage of produce in transit was usual, some shippers took advantage of this by filling their containers 2 percent short of the amount invoiced. Loss and deterioration of produce also occurred *within* the city, most notably in Chicago, where middlemen transferred the incoming produce not slated for local consumption to the city's freight houses, auction houses, and team tracks, and handled it once more for redistribution to other cities.

Added to the long list of problems associated with food in transit were unfair business practices, which were pervasive and ranged in scope and degree of offense. Unscrupulous farmers fed their poultry meal mixed heavily with salt so that they would drink a pound or more of water before being weighed, an abusive practice known as "cropping." Some shippers "topped off" their produce, meaning they filled a railcar with the highest quality goods on top, while inferior produce was concealed below. They might also load the car with bags of inferior produce placed far from the door, putting them out of reach for sample inspection. The large food distributors carried out graver abuses. With the meatpackers still under scrutiny, the FTC discovered that Armour & Co. attempted to buy one-third of the entire crop of raisins from a producers' organization in order to sell it under its private brand. This practice harked back to the ancient trade offense known as engrossing, whereby withdrawal of a huge quantity of produce from the usual channels of trade would create an artificial scarcity that in turn would trigger an increased market price. Armour also discriminated against local dealers who required cold storage within reach of their stores. After the company bought a repossessed public cold storage plant in Waterbury, Connecticut, in April 1918, it occupied only a fraction of the warehouse and leased a similarly small space to the Cudahy Packing Co., while refusing to lease the remaining two-thirds to local produce men.

Even as the FTC scrutinized business practices along the food chain, it also focused criticism on the physical inadequacies of wholesale markets. In Pittsburgh, for example, dealers transferred goods unloaded at the Monongahela Wharf to their stores scattered throughout many parts of the city. Some dealers did not even have stores, so they conducted their transactions directly with the farmers who landed their produce and live poultry at the wharf (fig. 3.5). The FTC also singled out New York City, whose merchant stores were "crude" buildings converted from their original purposes. "These

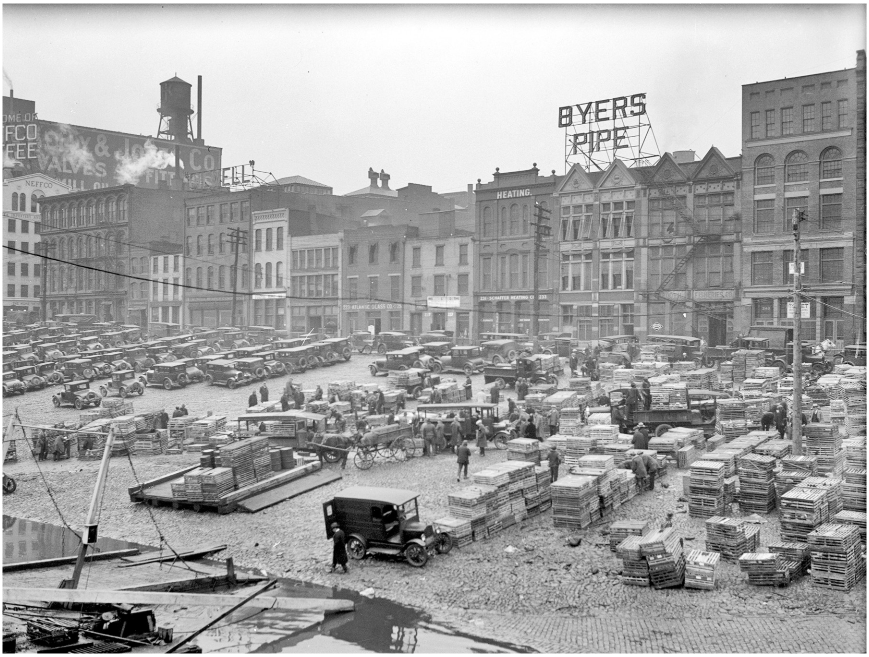


Figure 3.5. *Water Street, Pittsburgh, November 21, 1927.* Pittsburgh City Photographer Collection, Archives and Special Collections, University of Pittsburgh Library System.

buildings are old homes of early New Yorkers, of all sizes and inconveniences; the fronts have been knocked out and lean-to bonnets built out over the sidewalks to the curb to shelter the produce from the rain." Worse yet were the produce districts in general, "irregular and awkwardly contrived" and scattered throughout different parts of the city. "The usual notion of a market as a place where buyers and sellers regularly meet, a place that is well established in common knowledge and general habit is poorly realized." As a result, "control of the real primary market places for a present-day population of close upon 9,000,000 people, once the jealously guarded prerogative of the city, has passed into private hands." Dealers in New York complained that the amount of food lost from inefficiency and trade abuses would be enough to feed the entire city of Pittsburgh. The FTC pointed out that "because New York is the great Atlantic gateway of the country the problem of the efficient feeding of New York City widens to a national problem." There were no models for the country, and even the Los Angeles Union Terminal Market, despite its impressive facilities, was "simply a land improvement speculation and a monopoly controlled by one railroad."[94]

Anticipating pressure to end wartime food regulations, the FTC urged continued legislation as a proven instrument for curbing profiteering, the unnecessary trader, the speculator, and the wasteful handler. Food dealers and handlers could not manage the needed reforms, it argued, nor did the states and municipalities have adequate powers to regulate the trade. The FTC recommended the establishment of more wholesale public markets and storage plants, preferably under federal control; uniform standards for grading and packaging; and a federal licensing system for all dealers of perishable foods in central markets.[95] Based on its earlier conclusions for the meatpacking industry, the FTC recommended that the federal government establish central wholesale markets where it was practical and economical. It advocated the takeover of some or all of the existing branch houses, cold storage plants, and warehouses, and with additions and alterations convert them into suitable central wholesale markets for the wholesale food trade. In small cities, this would be more practical and cost-efficient than building new ones. "There would be no interference with the meat packers in using for the distribution of their goods the branch houses taken over by the Government. They would then have adequate market and storage space in the enlarged and improved branch houses and storage plants used as central wholesale markets, open to all wholesale food dealers on equal basis." Dealers favored government takeover of all rolling stock for shipping fruit, but the FTC suggested that the federal government might require railroads to unload all food products at a central terminal in each city and to provide adequate dry, heated, and cold storage. In a cautious tone, the FTC concluded: "The aim is not to destroy any efficiency the packers' distributive system may have, but to add to the efficiency of the national distribution of food products and to put all dealers on the same basis."[96]

Federal involvement in physical plant and commercial regulation of the wholesale produce trade would require a new institutional framework, and it was not immediately clear—nor was there consensus—as to which agency would assume the responsibility. The FTC suggested the newly formed United States Railroad Administration, while Herbert Hoover (by this time secretary of commerce) pressured president-elect Warren G. Harding to transfer farm management and marketing to commerce. Meanwhile a more obvious candidate emerged in the USDA, where the Bureau of Markets was showing its strength. The two bureaus, of Markets and Crop Estimates, were the best-known and most widely praised bureaus in the USDA. The USDA merged the two bureaus into a single Bureau of Markets and Crop Estimates on July 21, 1921, with Henry C. Taylor (then chief of the Office of Farm Management) as bureau chief. Taylor was a trained economist who had founded and chaired the Department of Agricultural Economics at the University of Wisconsin before coming to Washington. As such, he applied the principles of university tenure committees to review current personnel, assess outside candidates, and develop new lines of research in the bureau. Taylor sought a union of crop statistics, farm management, and marketing as a tool to help farmers understand their position in the economic life of the nation. His vision had little room for the agency's agronomists, who focused on the scientific and technical aspects of agricultural production. Within a year after Taylor's appointment, the Bureau of Markets and Crop Estimates merged with the offices of Farm Management and Farm Economics to form the new BAE on July 1, 1922—a move that put 1,800 employees under Taylor's leadership, including the USDA staff already engaged in terminal market studies. This seemingly bureaucratic move had far-reaching implications for the future of wholesale food marketing and distribution in the United States. Taylor and his team of economists succeeded in heading off Secretary Hoover at Commerce, whose tactics they believed would have put produce into the hands of commodities speculators. The BAE's expertise in agricultural economics influenced policymakers and ensured that the federal government would remain a key player in guiding the fate of wholesale food distribution from the 1920s on.[97]

Washington, DC, was an important stage for the early work of the BAE and subject of the next chapter. Washington—the nation's capital—was headquarters for the USDA and its staff of experts in the BAE. Since matters of marketing and distribution of perishable produce in large cities were constant subjects of congressional activity, the BAE staff was conveniently located to testify as experts in hearings and public debates. Also indicative of the growing importance of the nation's capital as a hotbed for food marketing reform was the move of the headquarters of the National League of Commission Merchants of the United States from New York to Washington in 1920. The leading trade organization representing the nation's commission merchants had come to realize that "it is at Washington that practically all measures affecting our industry gain birth."[98] Washington—the city—also played a key role in the long history of wholesale food distribution in the United States. Its central marketplace stood at the midpoint of the axis between the White House and the Capitol. Dozens of wholesale dealers operated from old nineteenth-century row houses next to a mammoth Victorian market house, and a municipal farmers' market stood nearby in the shadow of the new Post Office Building. By the 1920s, Washington's historic Center Market had come to impede the federal building program. The market's demise and ultimate split of the wholesale dealers between new terminals near the freight tracks of the Pennsylvania and the B&O Railroads were indicative of things to come in other cities. Washington—the city—engaged agricultural economists and marketing experts working in all levels of government and industry in a lively, lengthy, and well-documented debate with farmers, wholesalers, and consumers about whether or not physical facilities for the wholesale marketing and distribution of perishable produce had a future in the city center.

CHAPTER FOUR

The Nation's Capital

Testing Ground for the Wholesale Trade

> I do not see how the Fine Arts Commission is going to allow chickens, cattle, hogs, and all kinds of nasty odors in the center of population, as they call it, and which is supposed to be one of the prettiest cities in the world. . . . I am against that as a citizen of Washington. I love beauty, but a market belongs where it belongs.
>
> —Salvatore Scalco, president, National Fruit Company (1928)

Cities resumed market reform and planning in earnest after the Great War—each in its own way. In battling the high cost of living, the still-youthful New York City Department of Markets pursued the radical approach of stockpiling food reserves in municipal warehouses. Philadelphia mayor J. Hampton Moore preferred the status quo, dismissing proposals to improve market facilities because conditions in his city were "no worse than anywhere else." In Chicago, a group of merchants from the overcrowded South Water Street Market waited no longer for municipal action and formed the Produce Terminal Company, which promised a new wholesale market for the Windy City.[1] Private capital had already produced impressive produce terminals in Los Angeles and Atlanta, while other cities—Baltimore, Seattle, Indianapolis, and Memphis, among others—made news by establishing municipal wholesale markets where growers could sell their produce by the wagonload or carlot to retailers and institutional buyers. The USDA Bureau of Markets continued to survey and critique markets nationwide, and it stood "prepared to advise any municipality on the right ways of conducting one."[2]

Washington, DC, was a convenient testing ground for the produce trade, whose future rested on cooperation with the USDA. The agency's headquarters was across the National Mall from Center Market—the vibrant and historic marketplace on Pennsylvania Avenue, midway between the Capitol and the White House. The USDA's growing staff of agricultural economists, marketing and transportation specialists, and refrigeration engineers left no aspect of Washington's Center Market unexamined as they developed their nascent fields. Center Market was the only public market in the country subject to federal oversight, owing to its location in a city whose budget and local affairs was (and still is) subject to the approval of Congress. This fact gives the market a unique position in the history of food systems planning in the United States. The USDA operated Center Market from 1921 to 1930 while debates and legal battles ensued over plans to appropriate the site for government offices. It worked closely with the railroads, agricultural representatives, and members of the produce trade to implement what came to be the country's first move of an established and extensive marketplace to the urban periphery. The origins of the move date to the 1901 McMillan Plan to develop Pennsylvania Avenue into the row of monumental government buildings that it is today. The thirty years between 1901 and the market's demise in 1931 illuminate the pivotal decades when city planning experts, agricultural economists, members of the produce trade, the general public, and Congress engaged in lengthy public debate over the need for a market in the city core—a debate that was settled once and for all in Washington.

Washington's Historic Marketplace

In March 1931, Center Market was demolished to make way for construction of the National Archives. Before the dust and debris settled, the dealers either dispersed to other markets or retired from the business, while the adjacent Municipal Farmers' Market and the wholesale stores on Commission Row relocated to new wholesale terminals—one on the Southwest waterfront and the other on Florida Avenue in the northeast quadrant of the city. Backed by the Pennsylvania Railroad and the B&O, respectively, both market terminals absorbed the city's wholesale merchants, cold storage needs, loading facilities, and open space for farmers in a rapidly changing produce industry. While most visionary market projects from the first decades of the century remained shelved, the nation's capital tells the story of a new age for wholesalers, whose places of exchange could be expeditiously removed and relocated to more practical and efficient quarters designed expressly for receiving and distributing produce for the retailer and institutional buyer.

The history of Washington's central marketplace began with the urban plan for the nation's capital developed in 1791 by Major Pierre Charles L'Enfant and revised in 1792 by Andrew Ellicott. The plan called for a central market formed by a two-acre pentagonal lot bound by Pennsylvania and Louisiana Avenues on the north, Canal Street on the south, and Seventh and Ninth Streets on the east and west (now the site of the National Archives). The federal government purchased the land from proprietor David Burnes, and Center Market formally opened on December 15, 1801, followed by the establishment of four more markets within the next twelve years: Eastern Branch Market, Western Market, New Jersey Avenue Market, and Capitol Hill Market. In 1813, the *Intelligencer* reported that Center Market was the best one in the city—a reputation it held for the next one hundred years.[3]

Although municipal affairs in the District of Columbia were subject to congressional oversight, the city government nonetheless had the power to enact laws and ordinances that governed municipal affairs, including the operation of public markets. The District market laws in the early republican and antebellum decades were consistent with those in other cities—namely, they upheld the municipal monopoly of the food supply. The sale of perishables took place exclusively in the mandated public markets, and there were strict limits on the sale of produce by the hands of others who would sell it again. The market laws of 1857 repeated this declaration with the added clause that one could not buy provisions in the public markets during market hours and sell them again in the markets *or in any part of the city*. Following a population surge after the Civil War, owing to the influx of freedmen and a growing government workforce, the city council loosened restrictions on intermediaries in order to stimulate the food supply. In the climate of open entry, the latter phrase of the law—*or in any part of the city*—was struck from the books by an amendment dated November 7, 1866. This modification in the law permitted market stall dealers to serve not only the walk-in household customer but also the city's hucksters, wholesalers, and owners of neighborhood eateries and grocery stores who purchased in bulk.[4]

After 1870, wholesalers had even more incentive to locate in or near Center Market when Congress passed an act to incorporate the Washington Market Company, which was empowered to construct and manage a new market house to replace the old city-run market within two years.[5] The German-born architect Adolf Cluss designed the new Center Market building between 1872 and 1878, which at 57,500 square feet was the country's largest market house, followed by Washington Market in New York (52,000 square feet) and the Farmers' Market in Philadelphia (32,400 square feet). In addition to the building's six hundred retail stalls, wholesalers rented space in the basement or one of the fancy stores that faced Pennsylvania Avenue between the Seventh and Ninth Street wings. The fancy stores formed a special feature of Center Market. Twelve in all, they were faced with brick and capped with rooftop lunettes, and a continuous second-story porch with iron railings protected the store entrances below. Cluss accounted for the

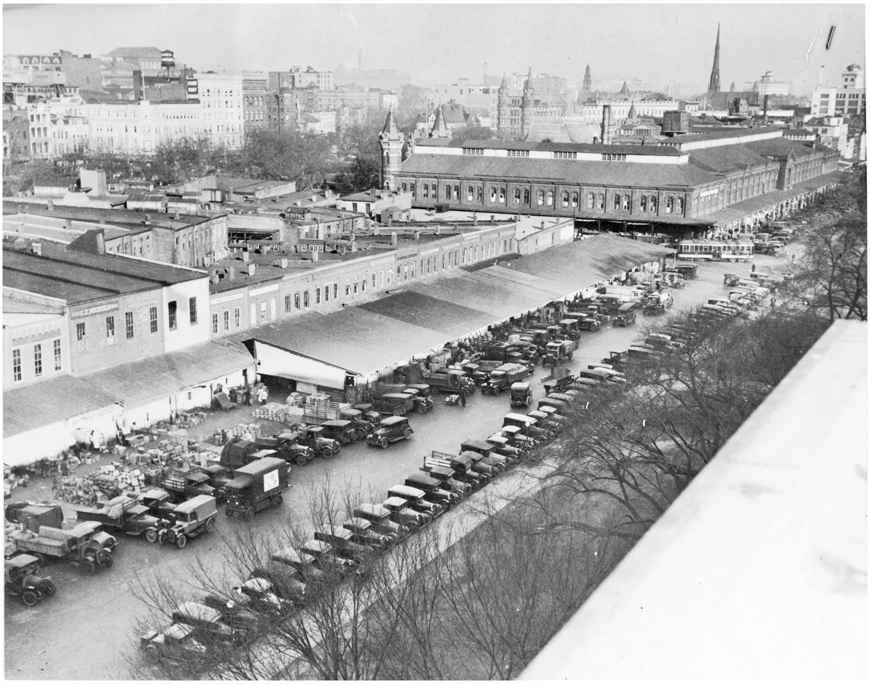


Figure 4.1. *View Looking Northeast. Commission Row and the Center Market Building (upper right), Washington, DC, 1928.* The US Department of Justice Building stands on the former site of Commission Row, and the National Archives Building stands on the former site of the Center Market Building. Courtesy DC Public Library, Washingtoniana Division.

high cost of construction, reporting before the Senate Committee on the District of Columbia that he had designed the stores for a certain class of market men, who differed from the local dealers in the retail wings of the main building and from the country people who sold produce outdoors (fig. 4.1).[6]

Armour and Swift, the nation's largest dealers in Chicago dressed beef, were among the tenants in the row of wholesale stores. According to the *Washington Post*, March 1, 1885, Armour occupied Store No. 2 and stocked it with canned goods, corned beef, pork, and pickled meat in barrels. Store No. 3 held Armour's offices, salesroom, and scales, and Store No. 4 held a large icebox for fresh meat. The firm also used the upper floor of Store No. 4 to house lard, oils, and margarine. Swift occupied Store Nos. 13 and 14 for a pressed corned beef tank with a forty-barrel capacity and for a weighing station, where it was reported that one man could weigh a side of beef, swing it onto a moving track, and hang it in the refrigerator in fifteen seconds.

The retail and wholesale merchants at Center Market enjoyed the benefits of the cold storage and mechanical refrigeration that the Washington Market Company installed in 1886. The company declared itself a pioneer in the field, claiming it was the first market house in America and perhaps in the world to offer cold storage facilities. In 1904, following increased demand for refrigeration, the company received approval from Congress to lay conduit beneath Seventh and B Streets for the passage of refrigerating fluid from Center Market to the stores of nearby wholesalers. The business of cooling was also profitable enough to encourage the company to purchase the nearby square bound by Eleventh, Twelfth, E, and F Streets SW for a cold storage and ice-making plant. Although most of the manufactured ice was for use in Center Market, the Terminal Cold Storage and Ice Plant supplied ice to other dealers who bought by the ton or to individuals who bought ten or twenty pounds.[7]

The second component of the central marketplace was Commission Row, located on the south side of Pennsylvania Avenue between Ninth and Tenth Streets NW (now site of the Department of Justice)—home to dozens of local wholesale merchants who relied on proximity to the central marketplace. Dealers occupied low-rise brick stores with wide awnings over the sidewalks—a visually distinctive and functional feature of a typical produce district. Greeks and Italians were prominent tenants of Commission Row and built their reputation on specializing in "high-class vegetables" and "fancy fruits." George Chaconas was one of many dealers who had gotten his start as a huckster selling fruits and vegetables from a wagon before moving to Commission Row in 1906 (fig. 4.2).[8] He loaded his truck every morning and headed up Tenth Street or Pennsylvania Avenue in order to deliver produce in the northwest section of the city, where high-end stores specialized in fine groceries. Just across the street from Chaconas was the National Fruit Company, whose Sicilian-born president Salvatore Scalco went on to become a major advocate for a new wholesale district in the southwest quadrant of the city.[9]

The third component of the marketplace, in addition to the massive Center Market building and Commission Row, was the Municipal Farmers' Market, located in the open space formed by the intersection of Louisiana Avenue, Ohio Avenue, and B Street North (now Constitution Avenue), between Tenth and Twelfth Streets NW (now site of the Internal Revenue

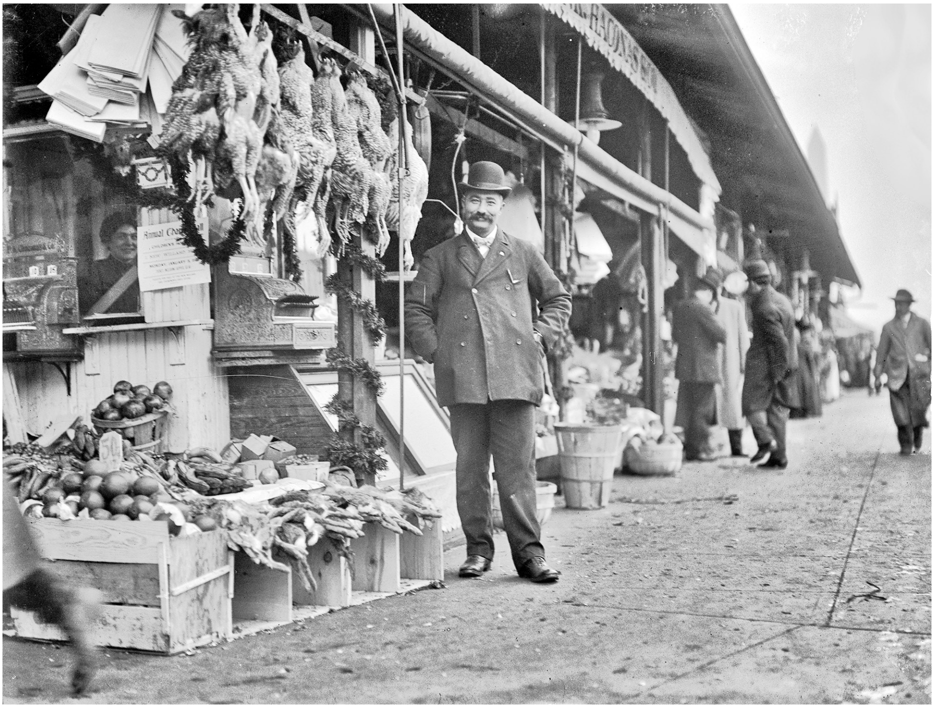


***Figure 4.2.** P. K. Chaconas Co. Market, George Chaconas, Proprietor, 924 Louisiana Avenue NW, Commission Row, Washington, DC, 1915.* Shorpy Historic Photo Archive.

Service Building). Established by an act of Congress in 1871, the Municipal Farmers' Market provided open space for the farmers and dealers who had previously blocked the streets and sidewalks around the Center Market building with their wagonloads of bulk produce, hay, and livestock.

Signs of Change: The 1901 McMillan Plan

It was only a matter of time before the tripartite marketplace, consisting of the Center Market building (Seventh to Ninth Streets), Commission Row (Ninth to Tenth Streets), and the Municipal Farmers' Market (Tenth to Twelfth Streets), became a victim of its own success. Food delivery trucks and the sale of live animals near the Mall were at odds with municipal regulations that limited obstruction of sidewalks and public thoroughfares. Even the national meat-packers (Nelson, Morris; Swift; Armour; and G. H. Hammond) proposed withdrawing from Center Market in order to erect a joint cold storage warehouse close to the freight yards. This news did not bode well for the market's future. According to the *Washington Post*, if the big meat firms moved they would take with them practically all the commission men from Louisiana Avenue. The ambitious scheme did not materialize for lack of consensus on location and site, but it did plant the seed for a long debate about where and how best to shelter the rapidly growing wholesale trade in the nation's capital.[10]

Center Market's local dealers also faced the bad publicity that surrounded a growing national meat trade in the wake of the enactment of the Pure Food and Drug Act of 1906. Collaborating in 1906, meat dealers T. T. Keane Provision Company, N. Auth Provision Company, and A. Loeffler Sausage and Provision Company ran a defensive, full-page advertisement in the *Washington Times*, inviting the public to visit their individual processing plants and their new joint venture, the Washington Slaughtering and Cold Storage Company in Benning, Northeast. The advertisement promoted their facility as a "model of cleanliness" and emphasized the local nature of their business. Long-standing local firms prepared meat products at their abattoir, where "cattle arrived on the hoof from the farms of Maryland and Virginia"—distinctions the dealers used to set themselves apart from the Chicago-based firms that shipped dressed meat to the capital. "I don't know what the Western packers are doing, but I know what we are doing and what natural meat is, and I know that people want natural meat," said Michael Keane, president of T. T. Keane. Their key competitors, Armour and Swift, were also busy constructing modern branch houses and expanding their real estate presence in the area. Armour invited "the curious housewife" to shop for "government-inspected meats and pure foods" in its new sanitary, two-story brick store at 1019 Cameron Street in nearby Alexandria, Virginia, noting that "wood was eliminated in the construction wherever possible."[11] In 1907, Swift purchased a lot in the District of Columbia bound by L Street, M Street, First Street, and Delaware Avenue NE, near the B&O freight terminal and the new Union Station. Swift's plant (which did not open until 1920) received refrigerated railcars of meat and products directly into the building, where two forty-ton ice machines, a cooler for pickled meats, and a smoke house facilitated storage and processing.[12]

The biggest sign of a precarious future for Washington's historic marketplace came with the McMillan Plan of 1901—the comprehensive planning document prepared by the Senate Park Commission for development of the Mall and park system. A key component of the plan was a monumental core of buildings south of Pennsylvania Avenue to house the expanding federal government. It also made provisions for a new complex of municipal buildings to encompass a market, armory, and headquarters for the police and fire departments. With current conditions at the marketplace deemed unsatisfactory, a new market would have sufficient space in the complex and would be designed so as not to encroach upon the principal thoroughfares. The Park Commission recommended as models the markets of Paris, Budapest, and other cities of continental Europe, where driveways extended through the buildings.[13] The Park Commission also hoped for a market house more aesthetically pleasing than the mammoth Victorian Center Market building, whose redbrick construction, corner turrets, and mansard roof were unfitting for the neoclassical white marble–and-limestone-clad government buildings to come.[14]

Regardless of what anyone thought about Center Market's outdated architecture and poor traffic flow, most people in Washington still depended on it for their daily provisions. Business was booming. The Center Market building alone housed hundreds of food merchants, several nationally recognized wholesale meat suppliers, and a commercial cold storage plant onsite. Dealers purchased most of their stock from any one of the wholesale markets in the city, including the adjacent Municipal Farmers' Market, Commission Row, the municipal fish wharves on the waterfront, or the freight yards of the B&O and the Pennsylvania Railroads. During the high cost of living debates, the Center Market Leaders Association ran large newspaper ads to promote their low prices, variety, freshness, and specialty items—features that still attract customers to public markets today. Another factor that contributed to the market's success was the support of the USDA, which used Center Market as the venue for major food expositions. At the 1915 food exposition, Harvey Wiley, chief of the USDA's Bureau of Chemistry, presented the opening address titled "The Great Eating Industry," in which he celebrated its cornucopia and congratulated the dealers for their "fundamental service for all humanity."[15] The Bureau of Chemistry also rented cold storage space from the Washington Market Company in order to test the effects of freezing on the taste and quality of poultry and other food products. Other USDA bureaus had a stake in Center Market, including Plant Industry, which tested the effects of cold storage and transit on perishable produce, while the Bureau of Biological Survey studied methods for eradicating rats and other vermin from the premises. Biological Survey also used Center Market as a locus for training inspectors to issue search warrants for wild game suspected of being stored in freezers.[16]

Finally, the agency most invested in Center Market was the USDA Office of Markets, especially after it was elevated to bureau status in 1917. Center Market was an especially convenient venue for the bureau's regulatory work and enforcement of the Standard Container Act (1916) and the Warehouse Act (1916). It also served the bureau's growing staff of agricultural economists, food inspectors, marketing and transportation specialists, and refrigeration engineers, who used the Washington marketplace as a convenient venue in which to develop their nascent fields. In 1920, when a Norfolk architectural firm contacted the bureau for information on market designs, USDA staff member McFall Kerbey suggested they visit Center Market on their way to Cleveland, where they no doubt were heading to see the model West Side Market. Kerbey added that although Center Market was "not to be recommended particularly from an architectural standpoint," it was still one of the largest in the country and a model in all other respects.[17]

Municipal Market Reform in the District

While the fate of Center Market remained in the hands of the federal government, the District remained committed to managing the city's other public markets, including Eastern, Western, and Georgetown Markets; the Municipal Farmers' Market on B Street; and the fish wharf on the Washington Channel. Well aware of the national movement for market reform, W. C. Haskell, sealer of weights and measures, reported to the District commissioners that since other large cities were expending large sums for the establishment of markets for the producer, "the national capital should not be behind other progressive cities in this respect, but should set the example."[18] Given that Center Market would probably stay in place for a while, District officials supported Haskell's recommendation to provide sheds with portable steel frames and gravel roofs for the protection and accommodation of truck farmers and their patrons. Influenced by current City Beautiful principles, Haskell emphasized the aesthetic and practical features of the amenity. The city landscaped the farmers' market with sidewalks and paved the driveways in Belgian block or Medina sandstone recycled from other projects. The sheds could easily be relocated later, but meanwhile they projected a "dignified" appearance—an important consideration given their proximity to the Smithsonian's new Natural History Museum. The first shed was erected in 1914 and became an immediate success, with 144 stalls fully rented by bona fide farmers who catered to patrons arriving each day "with baskets and buggies and automobiles" to get their supplies. Demand for additional parking spaces for farmers prompted the city to provide two more sheds, making it one of the largest municipal farmers' markets in the country and an excellent revenue source for the city. Local officials referred briefly to the farmers' market as the Haskell Produce Market in honor of Haskell, who died suddenly during the improvement program. Its impressive long sheds, viewed against the backdrop of the Post Office Building, caught the attention of USDA photographers during construction. At the same time, USDA photographers in the Office (later Bureau) of Markets documented the entire market district from the excellent vantage point on the rooftop of the Smithsonian's US National Museum (now the National Museum of Natural History) (fig. 4.3).[19]

The USDA also watched with interest the city's more ambitious plan to develop a "market gateway" for wholesale fish and produce on the Southwest waterfront. Based on plans of the city architect Snowden Ashford, the fish market would consist of a long row of stores with a central portico leading

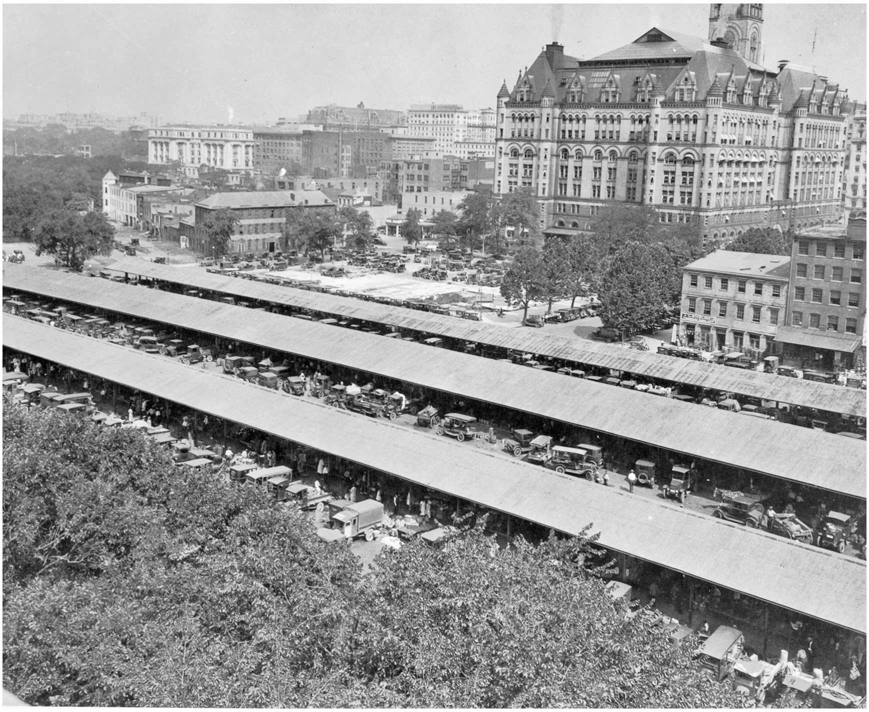


Figure 4.3. *Municipal Farmers' Market, Washington, DC, ca. 1915.* The Internal Revenue Service Building now stands on the site. National Archives, RG16-G, Box 325.

to three wharves on the Washington Channel. The Lower House of Congress, however, defeated a District appropriations bill for the market, and by doing so "deprived Washington of one of its most needed improvements." The District lost an important source of revenue, as suppliers of seafood and produce diverted shipments to better port facilities in Baltimore, New York, and Philadelphia.[20]

Nonetheless, the District persisted with plans for a terminal market with cold storage facilities near the municipal fish wharves. John H. Sherman, "efficiency expert" and Haskell's successor as superintendent of weights, measures, and markets, considered it an important step in tackling "the problems of markets, food transportation, and distribution." The local women's organizations, labor unions, and the Socialist Party of the District also supported the plan because a municipal terminal market would enable the city to regulate food prices and supply for the benefit of the average shopper, huckster, and pushcart vendor.[21] Sherman hoped that all of the dealers at Commission Row would move to a municipal market and cold storage facility on the waterfront. Then, the District could better manage the system of moving and storing perishables "between the railroad and the wharf, between the trolley and the wharf, between the trolley and the railroad, [and] between the wholesaler and the retailer." Sherman reported, "City builders all over the country are creating modern, efficient, economical wholesale markets," an idea he got from leading experts in the field. He was particularly inspired by Cyrus Miller's proposed Bronx Terminal Market and by the proven success of the Sheriff Street Market and Cold Storage Company in Cleveland. The USDA Office of Markets called Sherman's plan of "definite value to practically every city in the country as a model effort at demonstrating the possible economies of proper organization and facilities for distribution of food products."[22]

In 1917, Congress appropriated $200,000 for the District to proceed with marketing improvements on the waterfront. The District revived Ashford's earlier designs, but his plans for the fish market building elicited letters of alarm to members of the US Commission of Fine Arts (CFA), the agency authorized by Congress to review designs for all public buildings erected in the District of Columbia. Cass Gilbert, prominent architect and member of the CFA, made a special trip to Washington to review Ashford's plans in order to ensure their compliance with the CFA's aesthetic criteria while still meeting the District's commitment for a reinvigorated industrial waterfront. The CFA disapproved of Ashford's proposal to use the Flemish Revival style, with a stepped parapet treatment for the roof of the fish market, and insisted on the Colonial Revival style more characteristic of other public buildings. The commission also eliminated from the plans the fish processing houses, railroad trestles, chimneystacks, and water tanks that would have served the requirements of the wholesalers and fish packers. Similarly, the CFA ignored the spatial requirements of the dealers by recommending a reduction in stall dimensions and door widths, thus altering the primary nature of the market's orientation from wholesale to retail use.[23]

After much agitation, the Municipal Fish Market opened in 1918 on the waterfront, while the nation was still at war. Its stately central portico had a three-bay arched entranceway at ground level and an upper floor story embellished with Ionic pilasters—an overall style and form reminiscent of the combined town hall and market type that was popular throughout the nineteenth century. Flanking the central entranceway were two wings with Doric porticos and gable roofs punctuated by dormer windows. Street parking was generous, and soon after it opened, the city was proud to announce that the market had dealt a blow to the high cost of living. Local favorites—roe shad, buck shad, trout, rockfish, and tilefish—were selling for less there than at the private retail outlets, and gross fish sales steadily rose in the market's first year of operation.[24]

Experts at the USDA thought otherwise of the new fish market, according to critical comments on the back of a mounted photograph in the Office of Markets, and likely written by USDA staff member G. V. Branch. "Because of lack of knowledge on the part of the architect as to what facilities the fish dealers needed and his unwillingness to take suggestions from the outside, the market has resulted in a high failure." More specifically, "the stores are too narrow, offices and doors too small, icing facilities inadequate, and worst of all no cold storage facilities, freezing plant or smokehouse. The 2nd story was spoiled for practical purposes by the roof construction." The municipal wharves and fish market building did not exactly constitute the terminal market that experts and members of the trade had envisioned, but the new facility was a start. Although the District had struggled for a long time with Congress and the CFA, the Municipal Fish Market nonetheless guaranteed the presence of food marketing on the waterfront, despite its less than perfect facilities for the fish trade.

The CFA ordered a comprehensive study on the removal of food marketing altogether from the Mall and its relocation to the waterfront so that the federal building program could proceed unhampered. Chairman Charles Moore was losing patience with the central marketplace, where "the approach to the National Museum and the Smithsonian is now through streets largely given over to the sale of produce, live animals, and other concomitants of open-air markets."[25] As they got closer to eviction from Louisiana Avenue, the wholesale merchants at Commission Row backed the idea of a municipal wholesale terminal market on the waterfront. According to National Fruit Company president Salvatore Scalco, the dealers were discontent with their location near Center Market because of problems inherent in the current system. Produce dealers paid exorbitant rent to absentee property owners for the privilege of having a store in Commission Row. Their stock often suffered damage in the freight yards, where railcars sat waiting to be unloaded. Dealers had to pay for the extra cost of trucking their stock from the freight yards to cold storage, then again to their stores, and produce often rotted on unprotected sidewalks while waiting for buyers (fig. 4.4).

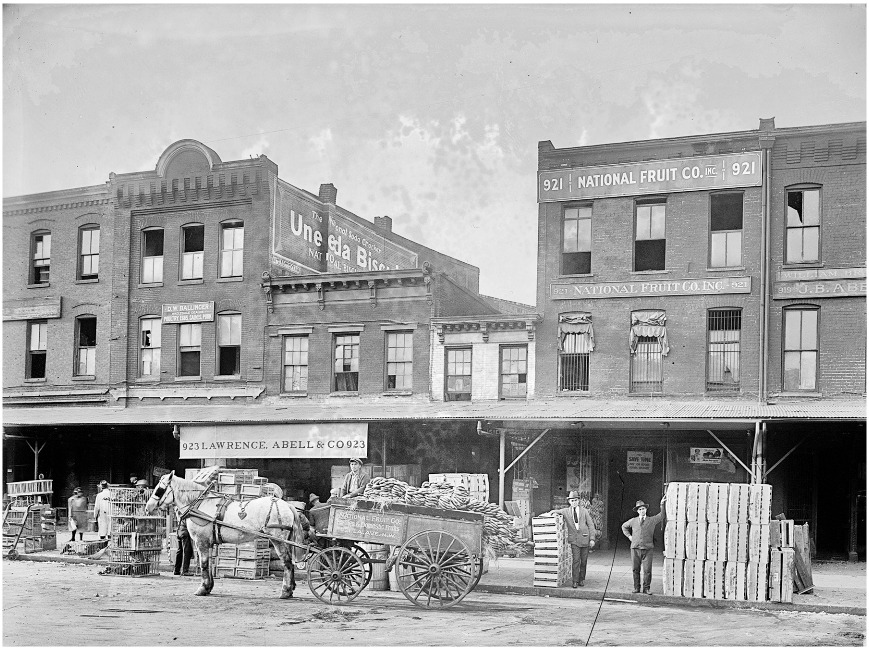

921 NATIONAL FRUIT CO. INC. 921
921 NATIONAL FRUIT CO. INC. 921
923 LAWRENCE, ABELL & CO 923
D. W. BALLINGER
Uneeda Biscuit
919 J.B. ABE

Figure 4.4. *National Fruit Co., Salvatore Scalco's Produce Business at 921 Louisiana Avenue NW, Commission Row, Washington, DC, ca. 1921.* Shorpy Historic Photo Archive.

All of these costs passed on to the consumer, and a more efficient system would eliminate them. Scalco and his fellow produce dealers welcomed a partnership with the city—one that would operate on the waterfront in a unified facility with rental rates not dictated by property owners, cold storage companies, or the railroads. It was not certain when the commission dealers were going to have to vacate Commission Row, so the idea remained on hold. Nonetheless, the plan represented a united front for most of the city's wholesalers, who recognized that their strength and future rested on staying together as a group, and presumably at a location that would offer competitive fees for storage and refrigeration.[26]

Elizabeth Lattimer, columnist for the *Washington Times*, invited her female readership to back a terminal market plan for Washington before things got worse. She described a terminal market as a simple idea—namely, a market situated on a location convenient to all transportation lines, where perishable food products could be unloaded at a single location from train, boat, or truck. In this way, the terminal would facilitate the work of the food inspector, easily connect with public cold storage, and enable the retailer to obtain provisions from a single place. Defending the standard line of the Bureau of Agricultural Economics (BAE), Lattimer explained that a terminal market was neither necessary nor even desirable to be located in the heart of the city, where land values were high. The market congestion in New York and Chicago, she concluded, "has awakened some of the smaller municipalities . . . to the value of a unified terminal system." Washington, she concluded, should take "the lead in this matter," since it was only a matter of time before the central market would have to be relocated anyway.[27]

The USDA at Center Market

While the District considered a future terminal market, Congress authorized an act to repeal the charter of the Washington Market Company on March 4, 1921, in order to regain control of the Center Market site for development. The act called for the federal government to pay the company a settlement for its capital investment in the buildings and grounds, and for outstanding leases with tenants, based on an amount determined by a special commission appointed by President Harding. The act also called for transfer and control of Center Market to the secretary of agriculture until Congress would direct otherwise. That control fell to Henry C. Wallace, the new secretary of agriculture appointed by Harding in 1921. Wallace immediately appointed

Clarence W. Kitchen in charge of the market with the assistance of a USDA cold storage specialist. Kitchen was a well-seasoned bureaucrat in the USDA and known for managing the telegraphic service that monitored the commercial movement and prevailing prices of principal fruit and vegetable crops nationwide.[28]

Center Market was soon absorbed by a huge federal apparatus—the BAE—created by the merger of the Bureau of Markets with the Office of Farm Management and Farm Economics on July 1, 1922. Secretary Wallace appointed Henry C. Taylor as first chief of the BAE—a move that ensured a prominent place for marketing research not only in Washington but also in other cities across the country, and eventually around the world. In testifying before the House Subcommittee on Appropriations for the Department of Agriculture, Taylor announced that "the real work of the new Bureau of Agricultural Economics is to put the farmer and the dealer in farm products in possession of the facts they need in order to act wisely in all these problems of production and marketing and to provide such service and supervision as will tend to establish efficiency and fair play in the marketing of farm products."[29] Taylor's emphasis on the relationship and moral bond between *the farmer and the dealer* anticipated changes to the structure of, and structures for, marketing farm produce. Unlike the traditional bond between *the farmer and the consumer,* the BAE would look for ways to help farmers solve their price and income problems by understanding marketing as part of the production process and by coordinating their efforts with dealers. The shifting bond of the farmer away from the consumer and closer to the dealer implied the need to improve the movement of produce from the farm to the railcar and wholesale markets, where wholesalers could stabilize and standardize the merchandise. It thus followed that the responsibility for meeting the needs of the household consumer would shift from the farmer and into the hands of the retail merchant.

Secretary Wallace and Bureau Chief Taylor made frequent visits to Center Market in its first year under BAE management, touring the site with Superintendent Kitchen and occasionally attending the food conferences, meetings, inspections, and tenant hearings held there. Kitchen reported favorably in his first annual report of 1923 that the majority of lessees were cooperating and that there was little dissatisfaction with government oversight. The lessees also welcomed the on-site USDA food inspector, since they recognized that good sanitary practices would increase public confidence in the market. Kitchen was keen to report that Center Market operations were not a financial burden to the federal government, since revenue from ice sales, stall rents, and public cold storage helped finance repairs and improvements.[30]

In 1923, the BAE had 900 employees at the Washington office, in addition to another 936 employees spread over 148 branch offices in 79 cities.[31] Although the responsibility for Center Market represented only a small fraction of the agency's scope, the market was critical to keeping the USDA in the forefront of nationwide marketing studies. Superintendent Kitchen directed all aspects of the market's management, including finances, lease agreements, advertising, and regulations. In his first year as market superintendent, he oversaw the remodeling of nine retail stands and a wholesale meat stand, fitting them with modern equipment and glass display cases designed by USDA technical staff. He also improved parking facilities, ran an advertising campaign financed by the dealers, and collected mandatory financial reports from all tenants. Kitchen turned over the financial reports to the BAE's Cost of Marketing division, which was gathering comparative data on wholesale and retail food prices nationwide.[32]

Everything from Center Market's financial data, accounting practices, and regulations, to architectural and engineering blueprints, designs, and photographs was available to the public upon request, and its operations were open to the public. Arthur E. Goodwin, assistant manager of Pike Place Market in Seattle, visited the market and applauded Superintendent Kitchen's accomplishments, but he asked why the only market owned by the federal government and operated by the USDA was not the premier market of the United States. Goodwin boasted of the markets out West, obviously making a pitch for Seattle's Pike Place, which employed marketing techniques for luring in customers, such as coffee roasting equipment, butter churns, doughnut machines, and revolving ovens—features he noted were lacking at Center Market. Goodwin, at least, being a compulsive record-keeper, found a place in his standard guide, *Markets: Public and Privat*e (1929), to praise the BAE for making it mandatory for stallholders at Center Market to submit financial statements and sign leases as requirements for tenancy.[33]

Despite smooth operations, Superintendent Kitchen grappled with constantly changing schedules, scenarios, and premature threats for the market's eviction from the Mall. A court decision of February 5, 1924, settled the award amount paid by the federal government to the Washington Market

Company to recover title in Center Market. The settlement rekindled the redevelopment plan for the area south of Pennsylvania Avenue, a responsibility that by 1926 fell to the National Capital Park and Planning Commission (NCPPC).[34] Frederick L. Coldren, secretary of the NCPPC, quickly released an opinion that title to the market property would *not* revert to the heirs of David Burnes, the original proprietor, who had conveyed title of the land for market purposes to the United States in the 1790s. Having paid back the Washington Market Company, and with clear title to the land, the federal government could do with Center Market as it pleased, an opinion upheld by the Supreme Court. This was just the beginning of the unprecedented task, since no one had yet agreed on a permanent location for the market business, and no American city had ever moved a market of this magnitude.[35]

New Market Sites Considered

The NCPPC formed a market subcommittee consisting of Major Carey H. Brown, engineer of the commission; George M. Roberts, District market official; and USDA representative C. W. Kitchen from Center Market.[36] Kitchen was the conduit for the latest USDA research on the characteristics of the produce trade in large cities, where the greatest challenge was not how to move produce from the farm to the table but rather how to move produce from the railcar to the wholesaler, then jobber, then retailer, and finally to "Mrs. Consumer." In order to identify potential sites for a rail-centered market, the NCPPC engaged the views of the Pennsylvania and the B&O Railroads, which already had experience handling perishable produce at their respective Washington freight yards. The Pennsylvania was interested in the development of a market center in Southwest, an area that by 1926 was ripe for commercial expansion. The area already had buildings associated with the food trades, such as the Municipal Fish Market and the Cudahy meatpacking plant. Added to these were the vast Pennsylvania rail yards, which received packaged freight—everything from processed groceries and canned goods, to dried fruit, cereals, and sugar, to perishable produce arriving in refrigerated carlots from the Potomac Yard located four miles south. Freight moving from the South over the Southern Railway, Atlantic Coast Line, and Seaboard Air Line, and from the West over the Chesapeake and Ohio Railroad converged at the Potomac Yard. In addition to taking advantage of existing rail facilities, a Southwest development project offered the potential to revive the wharves on the Washington Channel, which had once enjoyed a flourishing business from coastwise steamers and rivercraft bringing watermelons and seafood from Maryland and Virginia.[37]

The NCPPC likewise consulted officials of the B&O Railroad, who favored a market site near their freight yards in the Northeast, on unused land in either Eckington or Brentwood (land known as the “Patterson Tract”). The Northeast location was not without opposition, as representatives of the neighborhood, including the Columbia Institution for the Deaf and Dumb (now Gallaudet University) and the Trinidad Citizens Association, protested a market in their vicinity for the refuse, vermin, and traffic that it would bring.[38]

While the NCPPC solicited the views of leaders in the produce business, the joint Washington Market Company and Terminal Refrigerating and Warehousing Company submitted a major plan to relocate the marketplace to the Southwest waterfront. The firm had more than fifty years of experience operating Center Market and had a physical presence in Southwest, where it had operated a cold storage warehouse and ice plant since 1907. The Southwest location also offered room for commercial expansion. In the words of Comptroller R. D. Marshall: “It is an established fact that the location of market and food centers in residential sections proves disastrous to such property and causes to grow around these market centers zones of depreciated property which acts as a barrier between the Market district and the adjoining residential section.” This situation, however, would not occur in Southwest because natural barriers formed by the Washington Channel on the south and the railroad lines west and north of the waterfront would force a market to expand eastward, where land use was already commercial. The Southwest also offered the advantage of underutilized federal property and vacant land available through condemnation proceedings.[39]

While the NCPPC solicited the views of the railroads and members of the produce trade on the market’s relocation, city residents inundated the commission with letters expressing their own views. Public opinion grew so intense that the *Washington Post* appointed a “market site editor” to cover the story in print and on the radio. On August 8, 1926, the *Post* printed a “Market Site Ballot” that interested readers could clip, fill in, and mail to the editor. The ballot read, “The Farmers’ Market and Center Market should be moved to [blank],” and “Reasons for choice [blank],” with additional space for one’s name and address.[40]

Persons of all ages and occupations participated in the poll. Most household consumers tended to favor a mid-city site, albeit for different reasons. L. Bernhard, a housekeeper and government employee, reported going to Center Market regularly for breakfast, where she had met "hundreds of people there" over the years. "What would we do," she asked, "if you move it to the waterfront?" She preferred that it be "kept where it is and see no reason why it should not be, with all the available acreage for building now vacant or used by temporary buildings." If it had to move, she favored a mid-city location. Charles W. Bolgiano, proprietor of one of the oldest seed, fertilizer, and farm implement firms in Washington, also voted for mid-city, because it was the geographical center and close to the shopping district, and because he did not want his wife to have to cross town to shop for groceries. Truck farmers from Maryland also tended to favor the mid-city location. As J. H. Peak, of 611 E Street NE, explained on his *Post* ballot, the Hyattsville farmers could come into town via Rhode Island Avenue, the Benning farmers via Florida Avenue, and the Montgomery County farmers via Georgia Avenue. Loran J. Harrison, of Anacostia, owned a 150-acre farm with 40 acres "planted in truck," and he favored the mid-city site as long as all market activity were relocated there, including the wholesale and commission houses. A. J. Driscoll, president of the Mid-City Citizens Association, was an important voice for the mid-city location. He launched the campaign to locate Center Market and the Municipal Farmers' Market next to the privately owned Convention Hall Market, which if combined with the farmers and stallholders from Center Market would form a great "buying center" in the "actual geographical center of Washington."[41]

On August 29, 1926, when the *Post* poll ended, more than 28,000 people had cast their ballots—the majority for the waterfront site in Southwest, a significant number for a mid-city location, and an insignificant number for the Patterson Tract in Northeast. Location notwithstanding, the *Post* poll comments revealed the unexpected view that local growers would be best served by proximity to the wholesalers, wherever the latter would move. Farmers or their agents could bring produce by the wagonload to the marketplace, and they no longer had to sell exclusively to the household buyer. They were now in the same class with wholesalers and other middlemen who handled goods destined for resale. Engineer Commissioner Franklin Bell made a personal visit to the Municipal Farmers' Market at seven o'clock one morning, a week after the *Post* poll ended, in order to observe this activity firsthand. Bell found that "the business of the farmers is inextricably interwoven with that of the commission and wholesale dealers in produce," and at no point in the process did any of the produce make its way into the retail stalls at Center Market. This logic shifted the planning priority away from identifying a site for the retail stallholders at Center Market to finding a place where the wholesale trade at Commission Row and the Municipal Farmers' Market could continue in partnership.[42]

A Precarious Future for the Center Market Building

Pressure to remove the venerable Victorian market house remained intense, especially after President Coolidge appointed William Jardine as the new agriculture secretary. Jardine made sure that nothing stood in the way of the federal building program as long as he was in office (1925–1929). He made his position clear to CFA chairman Charles Moore when he declared that "in times past the public market occupied a much more important position in distributing the food supplies of cities than is now the case. Changes in the buying habits of the people in the large cities, the growth of the chain store system of retailing, the demand for special services, such as delivery and credit by customers, have materially minimized the functions properly belonging to the public market."[43] Jardine also stated publicly "to appropriate the present market site for the erection of a Government building would be the most important step that could be taken at this time to clean up the condition south of the Avenue, which is offensive to the senses." In its place, the federal government "would create an appropriate frontage for the National Museum and projected Art Museum Buildings on the Mall."[44]

In response to Jardine's announcement, the NCPPC considered measures to vacate the Center Market building on sixty days' notice. Waddy Wood, a prominent Washington architect, fellow of the American Institute of Architects, and president of its Washington Chapter, contacted Superintendent Kitchen about the practicability of enlarging the Convention Hall Market to accommodate temporarily the displaced dealers. In a lengthy memorandum to Wood, Kitchen dismissed any plan for temporary quarters as impractical, unwise, unfair, and lacking in legal authority. According to Kitchen's 1926 figures, the USDA had 173 outstanding leases with individuals and firms whose combined wholesale and retail sales totaled more than $15 million per year. Family-run businesses had operated stalls in the market for generations. They shared space under the same roof with major tenants such as National Hotel Supply, National City Dairy, Coliseum Bowling Alleys, and Armour, which continued to operate a wholesale store at Center Market (fig. 4.5). In addition, two hundred farmers occupied day stands on the B Street side of the building, where direct sales for produce totaled approximately $1 million

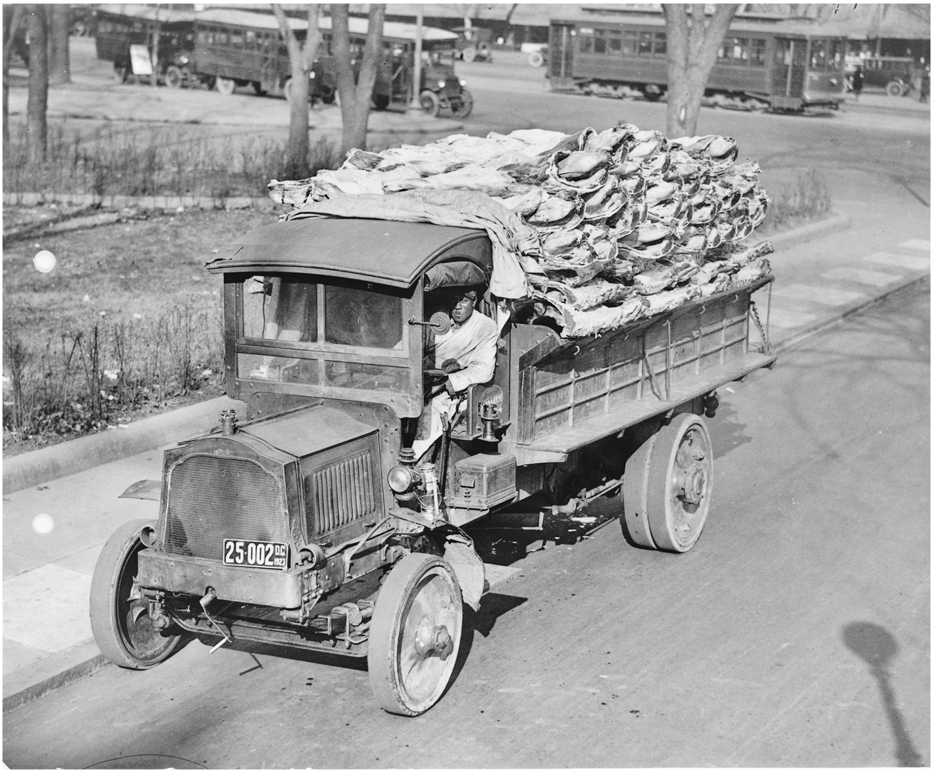


Figure 4.5. *Armour Meat Delivery Headed for Center Market, Washington, DC, 1923.* Library of Congress, Prints and Photographs Division, LC-USZ62-94998.

per annum. Refrigeration facilities were extensive, with 429,000 cubic feet of cold storage space in the market building proper—an amenity that would be impossible to replicate on short notice elsewhere. By Kitchen's calculations, it would cost between $3 million and $4 million to build a new market that would be "a model institution for the Nation."[45]

As long as the market site debates continued, Kitchen preferred to keep the Center Market dealers in place. In fact, he anticipated an increase in their business with the pending arrival of "the thousands of Government employees who will be located in that area under the new building program." Furthermore, an operational Center Market building was essential to USDA city marketing research. According to Kitchen, Center Market "affords the Department a medium for studying the most efficient method of operating a public market, the place the public market holds in the urban distribution of food supplies, and provides also an opportunity to utilize the refrigerating facilities in research work of the Department." Moreover, "it is an old established institution in the minds of the people of the District of Columbia, is the largest food handling establishment in the city, and one of the largest public retail markets in the United States." A sudden move would be an economic disaster and "would inevitably result in serious confusion and disturbance in the whole market machinery for the District."[46]

While the future of the Center Market building and its tenants remained tenuous, CFA chairman Charles Moore asked the USDA to clarify the need for a big public market house in Washington. Charles F. Marvin, acting secretary, replied that he could better answer the question "ten years from now." Thus, even the agricultural market experts in the USDA were not certain of the ramifications of eliminating Center Market for good. Marvin did surmise, however, that the smaller markets and chain stores might substitute for Center Market if it were abolished—a sentiment that ultimately gained wide appeal as the development of alternative food outlets was well under way.[47] Sympathetic to this argument was Lloyd S. Tenny, the new chief of the BAE appointed in the wake of market site debates. Tenny moved seamlessly from public service in the USDA to executive positions with numerous trade organizations, including the Florida Growers and Shippers League, Eastern Fruit and Produce Exchange of Rochester, North American Fruit Exchange of New York City, and Southern States Produce Distributors. Tenny was an advocate for the standardization of farm products as an aid to marketing, and he saw promise in marketing facilities that would cater to year-round suppliers of produce.[48]

Final action to move Center Market came swiftly in October 1930, when the Great Depression pressured President Hoover to accelerate the federal building program in order to provide employment through public works. Center Market officially closed on January 1, 1931, the city ordered demolition of the building in March, and there was no new market building for retail stallholders to take its place. Eighty-one retail merchants took up leases at the privately owned Convention Hall Market at Fifth and K Streets NW. A few other dealers went to various private markets, such as the Arcade Market at Fourteenth Street and Park Road NW. Some moved on to individual addresses, more than likely the location of their own stores, and others simply retired. All in all, nearly two thousand dealers and employees were displaced, as well as the four hundred farmers from Maryland and Virginia who set up outside stands in the shelter of the long canopies that surrounded the old market house. A feeling of loss reached Baltimore, where the *Sun* lamented that the Center Market butchers in Washington would have a difficult time finding affordable quarters with cold storage facilities comparable to what they were accustomed to. Furthermore, the restaurants that patronized Center Market for top-quality meats and bulk produce would now have to go to several locations to procure their stock.[49]

Thus, after decades of debate about where and how to shelter the packers, shippers, and distributors, enthusiasm for rehousing the market stallholders had waned. As one journalist exclaimed, What use was a single large market house anywhere the center of the city when shoppers could now choose among ten neighborhood markets (the municipal Western and Eastern Markets, plus eight private market houses), where dealers could be closer to the housewife, and where competition would not be so great?[50] The 1926 *Washington City Directory* listed thirty-five Piggly Wiggly stores, not to mention the presence of A&P and other chain-owned food outlets. Moreover, by 1930 shoppers in Northwest Washington could patronize the novel Park and Shop on Connecticut Avenue in Cleveland Park, inspired by the drive-in markets in Los Angeles. The Park and Shop was an L-shaped building that faced a large forecourt with off-street parking and consisted of stores with shared party walls and discrete units. The food retailers dominated, with Piggly Wiggly and A&P serving as anchor tenants. A continuous canopy ran the length of the building, permitting extensive open-air displays—an amenity that was the hallmark of public markets.[51]

"Obviously, men representing large capital do not see a future for a Center Market here, else one would have been in the course of construction at this time," wrote Fred J. Rice for the *Washington Post*. As for continued federal involvement, "the Government should not pick a site for a Center Market and lay down an arbitrary law that the public must patronize that market. . . . What guarantee has the Government that the proposed Center Market will be fully or even partly rented and, if not, why speculate with the taxpayer's money when schools and other necessary public improvements are needed?" Public investment in a new retail market house for the District was no longer on the horizon.[52]

Washington's Wholesale Market in Southwest

With the fate of the wholesale trade firmly in the hands of the NCPPC, the *Washington Post* announced the coming of a thirty-year comprehensive regional plan that would place a marketing hub in Southwest as part of the overall plan to coordinate the city's food provisioning requirements with the railroads and other transportation systems. Harland Bartholomew and William D. Hudson, the planning experts from St. Louis, were consultants for the regional plan. Following their initial studies, Hudson, the transportation specialist on the team, informed the NCPPC that the Pennsylvania Railroad would back a new market center in Southwest; convert its Water Street freight terminal into a row of commission houses for rent, lease, or sale to the city's dealers; and extend its tracks to a common freight terminal in Northeast. The plan would accommodate the movement of produce into Washington and points beyond without interfering with downtown traffic.[53] It also appealed to the Pennsylvania Railroad, which had just opened a 400,000-square-foot terminal in New York City—"the world's largest produce market"—on Piers 27, 28, and 29, on the Hudson River waterfront, in cooperation with the United Fresh Fruit and Vegetable Association and National League of Commission Merchants. The New York terminal was "the last link in a chain that connected to the St. Louis and Chicago markets," and promised to link with the new terminal in Washington as well as those being built in other large cities, such as Philadelphia, Boston, Baltimore, Pittsburgh, Cleveland, and Detroit.[54]

With the backing of the Pennsylvania Railroad, the NCPPC focused development of marketing facilities on the Southwest waterfront, which had room for expansion and was already home to several meatpacking houses, a cold storage warehouse and ice-making plant, and the Municipal Fish Market and wharves. The area was also close to another cold storage and refrigeration facility—a new plant at 300 D Street SW that the Washington Market Company and the Terminal Refrigerating and Warehousing Company built with proceeds from the federal government's payment from the Center Market settlement. The Pennsylvania Railroad ran a line alongside the D Street warehouse, which provided direct switching connections for an entire train of cars to enter the building through a viaduct. The warehouse company also enjoyed a steady cold storage business with the Virginia apple growers.[55]

With the railroads and produce trade at the table, the NCPPC and the USDA held the view that the city's truck farmers would follow the wholesalers regardless of location—if they wanted to unload produce in the District. This logic put a replacement farmers' market low on the priority list, until the wholesale market was reestablished.[56] Andrew W. Mellon, secretary of the treasury, was anxious to keep on schedule with construction of the Internal Revenue Service Building and offered the District a temporary site for a municipal farmers' market so it could get out of the way. Mellon recommended federal property just north of the unfinished Meade Memorial, between Sixth and Seventh Streets NW. Public outcry ensued over the waste of public funds that Mellon was willing to commit for temporary sheds, as well as the impracticality of having to remove the farmers twice. Despite protests, the city dismantled the sheds of the Municipal Farmers' Market over several phases and relocated the farmers to temporary wooden shelters while a permanent site remained uncertain.[57]

On February 12, 1931, the Potomac Freight Terminal Company formally opened the Water Street Terminal on the Washington waterfront, with major backing from the Pennsylvania Railroad (fig. 4.6). The new facility promised to launch "a new and better era in the economic distribution of Washington's perishable food supplies."[58] Supporters included not only the Virginia farmers and the Pennsylvania Railroad but also Mrs. Harvey Wiley, widow of the "famous food authority" in the USDA.[59] A long row of contiguous brick stores, thirty in all, flanked the north side of Water Street (now Maine Avenue) between Twelfth and Fourteenth Streets SW. The terminal opened to fireworks, music, confetti, and a radio broadcast of speeches aimed to highlight the collaborative undertaking. The Pennsylvania Railroad Orchestra, Keystone Quartet, and the Washington Boys

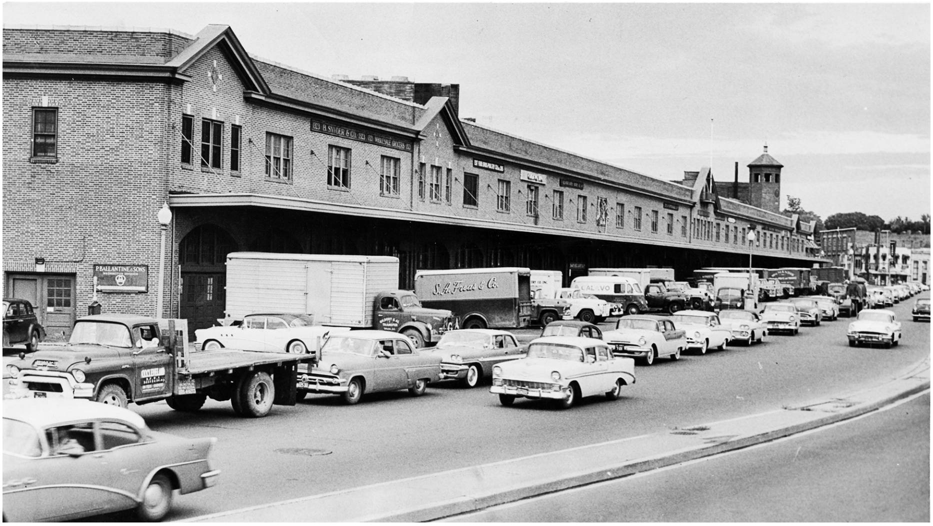


Figure 4.6. *Water Street Terminal, Washington, DC, 1958.* Reprinted with permission of the DC Public Library, Star Collection © *Washington Post.*

Independent Band performed, with free dancing on the lot behind Armour's new warehouse on Twelfth and E Streets. Presiding at the opening were representatives of the Potomac Freight Terminals Company, Pennsylvania Railroad, District Commissioners, and the newly formed Potomac Food Distributors Association. Representing the federal government was Congressman Gale H. Stalker (R-NY), the "legislative father" of a market in Southwest. Mrs. Wiley declared the opening to be "the realization of a dream," as did Salvatore Scalco, the veteran campaigner for a market center in Southwest.[60]

Charles Shalter Krick, general manager of the eastern region of the Pennsylvania Railroad, promised that the new facility would reduce excessive trucking around the city by providing direct rail service and refrigerated storage for incoming goods. He was proud that the capital had officially joined the ranks of other cities in which the Pennsylvania Railroad had invested heavily in perishable produce terminals—$22 million over the past five years, with major facilities in New York, Philadelphia, and Pittsburgh. The nation's railroads, he confirmed, were committed to securing the business of the dealers whose chief function was finding a market among city buyers for the large carlot trade.[61]

The "modified colonial architecture" of the Water Street Terminal met with the approval of the CFA, which ensured compliance with the intent of the 1901 McMillan Plan for harmonized buildings in the capital. The row of low-rise stores complemented the nearby Municipal Fish Market and had an overall form familiar to its tenants—the approximately seventy dealers from Commission Row. The stores were available for rent to merchants who handled the receipt, display, distribution, and storage of perishable produce such as poultry, meat, vegetables, and farm produce. Railroad sidings at the rear of the building permitted direct unloading of cars, and perishables could be stored forthwith in cold storage lockers or basements. Underground pipes from the nearby Terminal Refrigerating and Warehousing Company supplied the building with cooled brine for refrigeration. Each store had a wide, arched doorway leading into the ground floor sales room, and a second-story office. A suspended metal canopy ran the entire length of the building's exterior, providing sidewalk protection for produce displays. The roofline was marked with a continuous metal cornice punctuated by open pediments decorated with bull's-eye windows. Simple in its design and execution, the produce market met the requirements of the wholesalers and augmented the nearby Municipal Fish Market operated by the city. The produce terminal and the Municipal Fish Market combined to make the Washington Channel waterfront an accessible, functional, and attractive environment for marketing and recreation.[62]

Amid the excitement in Southwest, CFA chairman Charles Moore received a proposal from the District for a new municipal farmers' market on the waterfront to absorb the farmers displaced from the Mall. Moore, however, opposed the sidewalk shelters proposed by the municipal architect Albert L. Harris and stated emphatically that "farmers can sell from their wagons like they always have."[63] Without the cooperation of the CFA, the District had little choice but to obtain its own site for a new farmers' market—one that fell outside of the CFA's jurisdiction. For the reduced price of $5,000, the District purchased a small tract of land on Tenth Street between E and F Streets SW from the Terminal Refrigerating and Warehousing Company, which was anxious to lure suppliers of local produce to the Water Street Terminal. There, the new Municipal Produce Market opened for business on May 23, 1932. The District erected protective sheds large enough to accommodate 125 farmers, and market regulations restricted licenses for producers only.[64]

Unimpressed with the new Municipal Produce Market in Southwest was Mrs. W. B. Doak, owner of a three-hundred-acre family farm in Clifton Station, Fairfax County, Virginia, and of a former business at Center Market. She considered the municipal sheds to be "ugly, dirty and unprotected from the elements," features that were unacceptable for the "men, women, boys, and girls who produce the food and must sell it in order to live." She also pointed out that Washington spends millions to maintain the title "The City Beautiful," while at the same time it wrecked perfectly good buildings such as the Center Market. Mrs. Doak had hoped for an enclosed building perhaps not the size of Center Market but at least one with public cold storage, an attractive ladies room, and an office where men could transact their business year-round. Moreover, she missed the camaraderie and convenience that a large central market had offered, where neighbors and family members with refrigerated stalls could store her unsold perishables overnight or have better luck selling the goods on her behalf the next day. Now, she found it "awfully discouraging to reload and retrace weary miles for perishable produce" at the farmers' market in Southwest.[65]

Mrs. Doak had no qualms with the conveniences offered by the waterfront location. In fact, she praised the ample parking space, rail service, and natural resources of the Potomac River waterfront, which had a spectacular approach and good views of Hains Point, “one of the most beautiful drives about the city.” These amenities, however, were untapped, and “landscaping would add beauty to this side of the river.” An attractive and comfortable waterfront would also lure farmers from distant points south to take advantage of the cheap water transportation to ship melons, potatoes, and other bulk produce to the municipal wharves, where rates were reasonable. “For the cost of a few marble Corinthian columns,” Southwest offered the potential “for an ideal farmers’ market for our National Capital.”

Mr. Doak was also skeptical of the new channels of food marketing in the District. As a farmer who raised lamb for the butchers at Center Market, he now found it inconvenient and costly to make the rounds looking for buyers. One day in 1932, he went around to a dozen dealers and butchers in Washington and Alexandria, only to receive twelve cents per pound for his lambs. It had been even worse the previous summer, when his sons received only three cents per pound, or half the going wholesale price, from the Washington abattoirs for their farm-raised lambs. Doak found it hard to accept “slave-labor prices” in a city booming with new construction and a steady influx of government employees during the Great Depression.[66]

A small relief for direct marketing between the farmer and the consumer amid the loss of the central marketplace came when the District provided additional farmers’ sheds at the Eastern and Western Market houses, where stands were reserved for bona fide producers who rented by the day.[67] A more ambitious undertaking was the Montgomery County Farm Women’s Cooperative Market, founded in 1932 in Bethesda, Maryland, adjacent to the District of Columbia. Members of the Extension Service Homemakers Clubs spearheaded the venture, whose all-female vendors sold fresh produce, baked goods, and other homemade products on an open lot at 7155 Wisconsin Avenue. The market was an immediate success. Streetcar service and ample parking made it a convenient shopping choice for government employees and embassy staff willing to pay a premium for high-quality produce. The property owner, Leon Arnold, hired the prolific Washington architect Arthur B. Heaton to design a market building for the lot. The Farm Women’s Market Cooperative promptly leased the building, and then purchased it from Arnold with a loan from the Cooperative Bank of Baltimore in 1935.[68] Heaton also drew up plans for a farmers’ market at Fifth and K Streets NW for the Alley Clearance Authority. Heaton’s designs for farmers’ markets attest to the embrace of automobiles and off-street parking for modern food shopping, and they considered the produce truck as an important factor in delivery, redistribution, and direct sales of farm produce.[69]

While the dismal economy stimulated direct marketing of farm produce in certain neighborhoods of the city, it also brought unexpected benefits to the Southwest market center, whose wholesalers enjoyed a healthy patronage from price-conscious consumers who sometimes economized or shared costs by buying produce in bulk. The unemployed frequented the area around closing time, when they bought marked-down vegetables at the Water Street Terminal or Municipal Produce Market, or dated seafood for pennies at the Municipal Fish Market. Others ravaged barrels and crates in search of free goods. Even the more fortunate residents of the city patronized the restaurants on the waterfront, where they could enjoy fresh-cooked seafood at low prices.[70] Although Congress never appropriated the necessary funds for proper landscaping of the waterfront, the Southwest generated its own special atmosphere and ambiance as a vibrant produce district—a position it held until urban renewal demolished the area in the late 1950s.[71]

The Union Market Terminal in Northeast (aka Florida Avenue Market)

In tandem with the opening of the market center in Southwest was a second wholesale market in the northeast section of the city, which had supporters among the dealers from Commission Row who had business connections oriented toward Maryland. The northeast was favored not only for its proximity to the B&O freight yards but also for its easy road access for Maryland farmers. Dr. T. B. Symons, head of the extension service at the University of Maryland, hoped for a covered farmers' market—one with loading platforms and based on a plat he had obtained from the City of Detroit.[72] Symons represented 350 Maryland farmers at an earlier hearing over a Northeast site, when he was "loudly applauded by a large gathering of bronzed farmers."[73] A minority voice against a market in Northeast was Gilbert Grosvenor, president of the National Geographic Society, who complained that a wholesale market near its printing operation "would introduce elements that would be highly undesirable for this pleasant section" of the city, where "the neighborhood is inhabited by white people only, and all the surroundings are pleasant and agreeable for the society's employees." Stephen Warfield Gambrill, the US senator from Maryland, dismissed Grosvenor's arguments. Despite the fact that the National Geographic Society was "composed of brilliant explorers," Gambrill *explored* the neighborhood for himself, only to find to his amazement that railroad yards, shipping offices, and warehouses already surrounded it.[74]

Clearly, the winds had changed to favor locating produce markets in industrial settings with rail access, and without regard to the preferences of local farmers and household buyers. According to the new logic, farmers would unload their produce or ship their produce by rail to the new market terminal, where distributors of meat and fish could also locate. There, the retail merchants would purchase their stock and return to their grocery stores, where the household buyer dominated. Soon after Congress approved the location of a new building for the Department of Justice to stand on the former site of Commission Row, eviction proceedings and demolition of the old wholesale stores proceeded swiftly, as did preparation for new marketing facilities in Northwest.[75]

The Union Market Terminal formally opened just a few days after the Water Street Terminal, on February 16, 1931, with backing from some of the former dealers at Center Market. Anticipating their eviction from the Mall, they had banded together to buy eighty-six acres in the Camp Meigs section of the Patterson Tract, bound by Florida Avenue, New York Avenue, the freight tracks of the B&O, and Gallaudet University. Senators Millard Tydings and William Bruce of Maryland supported the project, since the site was on the truck route between Maryland's productive southern shore and Washington. George B. Ford, president of the American Society of City Planners, had also expressed his support for the plan, especially if the Pennsylvania Railroad were to extend its tracks there.[76]

The Charles H. Tompkins Company constructed the first buildings at the Union Market Terminal between 1929 and 1932, based on the design of the architect Edward Lippincott Bullock Jr. A series of parallel, two-story buildings, divided into stores of equal dimension, provided loading platforms at front and rear. Arcades ran the length of the platforms, with Doric columns defining each bay and its associated enterprise. The light, buff-colored brick and course of garlands in low relief promoted a clean, uniform appearance that marked a visual break from the improvised, redbrick stores and warehouses that had typified the previous quarters of the dealers. The row of flags and a lighted sign provided bold visual markers for buyers looking to find the market for the first time (fig. 4.7).[77]

The Union Market Terminal shared basic principles of design and function with the Water Street Terminal in Southwest, since it, too, would accom-

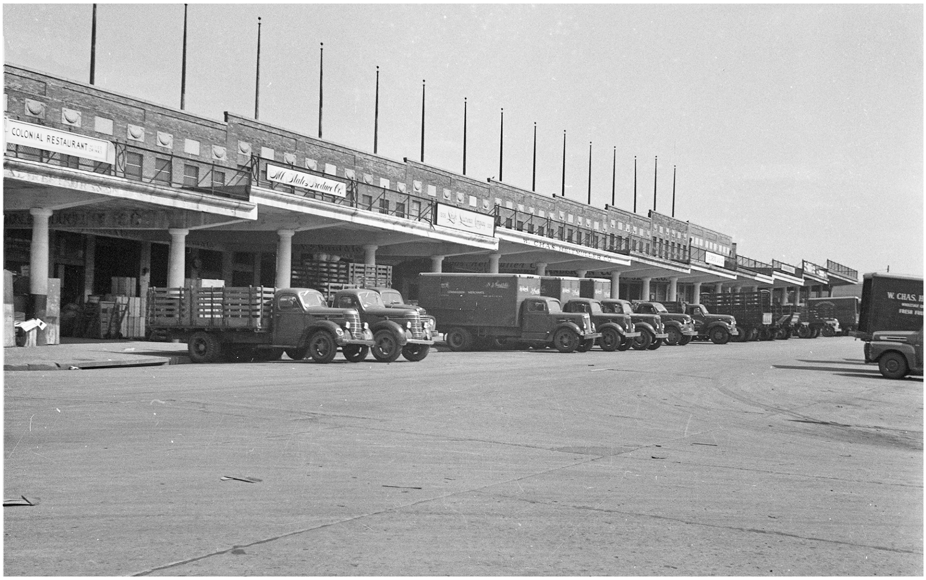


Figure 4.7. *Union Market, Washington, DC, 1949.* John P. Wymer Photograph Collection, Historical Society of Washington, DC.

modate a certain percentage of food merchants who operated at Commission Row. The dealers knew their suppliers and customers and already had established patterns of supply and distribution. The new market gave them a chance to design their quarters from scratch, to buy or purchase a standard store, equip it as needed, and modify it according to their needs. Most of the early occupants were first-time commercial property owners. Several family-run businesses from Commission Row, such as the Chaconas firm, bought initial lots in the retail section. Joining them at the Union Market Terminal was a lineup of several large wholesale produce dealers who were their neighbors at Commission Row, such as N. J. Ward (formerly at 927 B Street NW), W. Chas. Heitmuller (formerly at 923 B Street NW), and W. H. Harrison Co. (formerly at 907–911 B Street NW). The larger firms that carried both fruits and vegetables typically rented two adjoining stores of twenty-foot widths each. The early meat-packers were Sanitary Beef, Joseph Phillips, and H. H. Harris, who benefited from the special equipment and facilities designed for their trade, such as large coolers, refrigeration machinery, and a smokehouse. The Oriental Paper and Bag Company and Southern Hotel Supply were among the market's tenants engaged in businesses allied to the food trades.[78]

An important feature of the terminal was the farmers' market, whose open-air sheds accommodated approximately 215 farmers from Maryland and Virginia, who applied for stands there in 1931. The University of Maryland's Agricultural Extension Service recommended the construction of two sheds, 560 feet long and 30 feet wide, for the farmers' market. Ample parking and a critical mass of farmers enabled wholesale buyers to purchase local, seasonal produce direct from the producer.[79]

The merchants at Union Terminal Market invited their customers to "the Food Center of Washington," where they could benefit from convenient entrances on both Florida and New York Avenues, unlimited free parking, and business open for both wholesale and retail. Buildings and land use operations on the site expanded over the course of eight distinct building phases, so that the facility at its peak included wholesale stores, a farmers' market, a flea market, a public retail market, restaurants and nightclubs, automotive services, a bank, office space, and hotels. Although the market lacked proximity to goods arriving by water, initially considered a disadvantage compared to the Water Street Terminal, it benefited from the growing dominance of the motor truck.[80]

Throughout the long, drawn-out demise of their historic Center Market, Washingtonians must have related to the *Post* articles that covered the analogous and contemporaneous situation brewing in Chicago. Promoters of the Chicago Plan promised that they would soon remove the crooked and crowded market streets for the Wacker Drive project. In place of the old produce district, "the gay limousine will flash where heavy huckster wagons and delivery trucks rumbled. Silks will rustle where the commission cat purred atop an orange crate."[81] A new produce terminal for the Windy City promised to correct everything that was wrong with the old produce district downtown. Once the relocation efforts were completed, Washington and Chicago shared the distinction of having reorganized the wholesale food distribution system by force. Although dealers in both cities had opposed leaving their existing quarters, external factors such as a congressionally mandated federal building plan, in the case of Washington, or the new highway project in Chicago forced them to move—a lesson that reverberated later in other cities.[82]

Thus, the nation's capital secured space for an extensive federal building project that proceeded without any more interference from food marketing. As a result, Washington ended up with a produce trade split between two terminals.[83] After their openings in 1931, neither terminal made headlines outside of the Washington region, but they continued to fulfill their function as main centers of food distribution in the District of Columbia. Having accomplished the task of moving the central market out of the city core, the USDA was relieved of its local duties and was well positioned to take its lessons from Washington on the road, where the New Deal brought the wholesale trade into new state frontiers.

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PART THREE

NEW FRONTIERS

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CHAPTER FIVE

The New Deal

Birth of the State-Sponsored Regional Market

> If the expenditure of large sums of money can be justified for building dams to supply power, and also water to irrigate millions of acres on which to grow more produce, it does not seem unreasonable to suggest that federal funds be made available to erect large union produce markets for both truck and rail in key cities throughout the United States, through which this and other produce may be marketed at minimum costs.
>
> —Marius Peter Rasmussen, Cornell University (1936)

In 1935, Albert G. Black, chief of the USDA's Bureau of Agricultural Economics (BAE), reported with optimism that the steady advances in agricultural recovery, readjustment, and drought emergency brought increased opportunity and responsibility. Black was a strong supporter of Roosevelt's New Deal, and he remained loyal to agriculture secretary Henry A. Wallace during his tenure as bureau chief from 1935 to 1938. Under Black and assistant chief Clarence W. Kitchen, former USDA official in charge of Washington, DC's Center Market, the BAE willingly cooperated with and actively participated in the New Deal effort. Marketing remained a core research activity—a precedent Henry C. Taylor secured as founding bureau chief in 1922. While agricultural relief and recovery programs focused national attention on farms and rural life, the new BAE's Division of Marketing Research, as well as the bureau's other divisions—notably Fruits and Vegetables, Economic Information, and Statistical and Historical Research—kept urban food planning on the New Deal agenda.[1]

The BAE continued the momentum on terminal market studies that the USDA Office of Markets had begun in the 1910s. Despite the Depression, or perhaps because of it, the bureau took an active role in the assessment of current marketing systems and the development of improved facilities that were in line with the needs of a growing trade. Fruits and vegetables assumed a frontline position in this effort. Whereas livestock and milk were raw materials destined for the slaughterhouse and pasteurizing plant, fruits and vegetables dominated the kinds of perishable produce that arrived in cities and thus were determining factors in reorganizing the food system in terms of new facilities. According to Walter P. Hedden, the BAE agricultural economist who authored the seminal report on produce terminal requirements for the Port of New York Authority in 1925, the sheer volume of fruits and vegetables, their perishable nature, and small units of sale created planning imperatives that were relevant to all American cities.[2] Inspired by the nascent Port of New York Authority, the BAE introduced the public authority as a collaborative and sustainable form of ownership for big city food markets in not only New York but also other large cities with inadequate marketing infrastructure. Another BAE innovation during the New Deal was the organization and design of state-sponsored regional markets.

This chapter, and the one that follows, views the history of food wholesaling in the context of federalism and the new era of power sharing between the federal and state governments. The BAE navigated this balance of power as it channeled authority to the states in the form of marketing agreements with growers, state-sponsored markets that redirected supply chains, and the public authority as a new form of ownership for wholesale terminal markets. This new state authority marked a shift in food systems planning as primarily a municipal responsibility—a shift that had consequences for the American city and their food dealers.

Scope of the BAE

Charged with continuing its terminal market studies during the New Deal, the USDA kept marketing research a core program of the BAE—one that was historical, data-driven, and international in scope. Frederick V. Waugh held a PhD from Columbia University and had had a distinguished career as an agricultural economist when the USDA appointed him director of the BAE's new Marketing Research division in January 1935. Waugh was a well-known expert in the quantitative analysis of factors influencing the market price of vegetables, such as the seasons and quality, and he later developed the theoretical underpinnings of the food stamp program.[3] Less recognized are his contributions to the study of physical facilities for marketing as an essential component of the general program of agricultural readjustment. Waugh and his small staff of five agricultural economists argued that current marketing facilities and methods were uneconomic and inadequate, in part because they failed to account for the rapid development of motor truck distribution, large-scale retailing, and direct marketing by grower cooperatives. His division staff applied this critique to city markets throughout the nation, as did other agricultural economists in the bureau who were on special field assignments for terminal market studies, such as Ronald L. Migbell in Boston and Walter Hedden in New York. BAE marketing research reached consumer groups by way of the *Consumers' Guide,* issued by the Consumers' Counsel of the Agricultural Adjustment Administration, also in cooperation with the Bureaus of Home Economics and Labor Statistics. Consumers were encouraged to follow the results of the BAE's research on large terminal markets, whose operations directly affected their food dollars.[4]

The BAE's partners in marketing research included agricultural colleges, universities, and states with active market bureaus, which in 1935 were New York, Pennsylvania, Virginia, Wisconsin, Oklahoma, Texas, California, Florida, and North Carolina. The notion that growers produced for a world market was now firmly accepted and extended marketing research overseas, where the BAE handled four sections in its Foreign Service Division: the British Empire, Continental Europe, Latin America, and the Orient. Although the foreign field offices were curtailed in 1933 for economic reasons,[5] in January 1936, field offices were still operating in Buenos Aires, Shanghai, London, Paris, Berlin, and Belgrade, and single agents were assigned to Bradford, England; Honolulu, Hawaii; San Juan, Puerto Rico; and Bombay, India. Overseas staff reported regularly back to Washington on foreign crop production and prices, and on foreign demand for American agricultural products. They negotiated trade agreements and regularly attended international agriculture meetings.[6]

The Division of Statistical and Historical Research, directed by Dr. O. C. Stine, elevated the agency's reputation for fine research and scholarship on the marketing and distribution of farm produce. Stine and other distinguished research-oriented staff at the BAE, including Frederick Waugh, taught classes and seminars at the USDA Graduate School, founded in 1921 to provide advanced training in statistics and economics to members of the department. They taught alongside other USDA Graduate School instructors who worked outside the agency and had close ties to the BAE, such as Edwin Nourse of the Brookings Institution.[7] In addition to training, BAE marketing staff benefited from, and contributed to, the *Journal of Farm Economics* (later renamed the *American Journal of Agricultural Economics*)—an important forum for recent scholarship.

The Division of Economic Information established agreements with the New England Radio News Service and the *Western Farm and Home Hour* to provide regular broadcasts of market news. Adding to the division's reputation for disseminating current and reliable information on markets and marketing was the Economic Library (one of twenty-two libraries in the USDA). High demand for resources prompted Mary G. Lacy, head librarian, to publish an annotated *Bibliography on the Marketing of Agricultural Products* in 1932—an impressive undertaking that covered 3,039 references, including sources in languages other than English. In addition to its world-renowned library, the BAE managed a publications program that was highly esteemed for its quickly disseminated bulletins, periodicals, and reports on food marketing. The success of the program was due in part to Caroline Baldwin Sherman, who began her career in the USDA as the librarian in the Office of Markets in 1915. Miss Sherman moved up through the ranks over the decades to become head of editorial and research functions in the Division of Economic Information. Sherman's editorial eye, institutional history, and publishing record placed her among the bureau's authorities on markets during the New Deal.[8]

Fruits and Vegetables was one of the long-standing commodity-based divisions in the BAE and chaired by Wells A. Sherman (Caroline Sherman's nephew), who began his career at the USDA in 1915, when he supervised market surveys in the Office of Markets and Rural Organization. Sherman ran the Market News Service for Fruits and Vegetables, which produced annual "unload reports" on the amount of produce received at a given city market broken down by rail, ship, and motor truck receipts. By 1935, the Market News Service for Fruits and Vegetables was in its twentieth year and had come to define the geographical breadth of the BAE. The agency had access to nine thousand miles of leased telegraph wires and provided instant communication between fifty field offices in the principal cities and production areas of the country, where specialists compiled data on the commercial movement and prevailing market prices of principal fruit and vegetable crops. In 1936, approximately sixty thousand people were on the Market News mailing list. Growers and members of the produce trade subscribed regularly to the reports, which they valued for their timely, practical, and objective data (fig. 5.1).[9]

The BAE had operated Center Market in Washington, DC, for nearly a decade and was active in dozens of other cities for inspection services, regulatory functions, and the work of the Market News Service. The staff had long-standing relationships and strong channels of communication with the middlemen who made up the produce industry—railroad officials, wholesalers and jobbers, chain store managers, retailers, growers, shipping agents, and

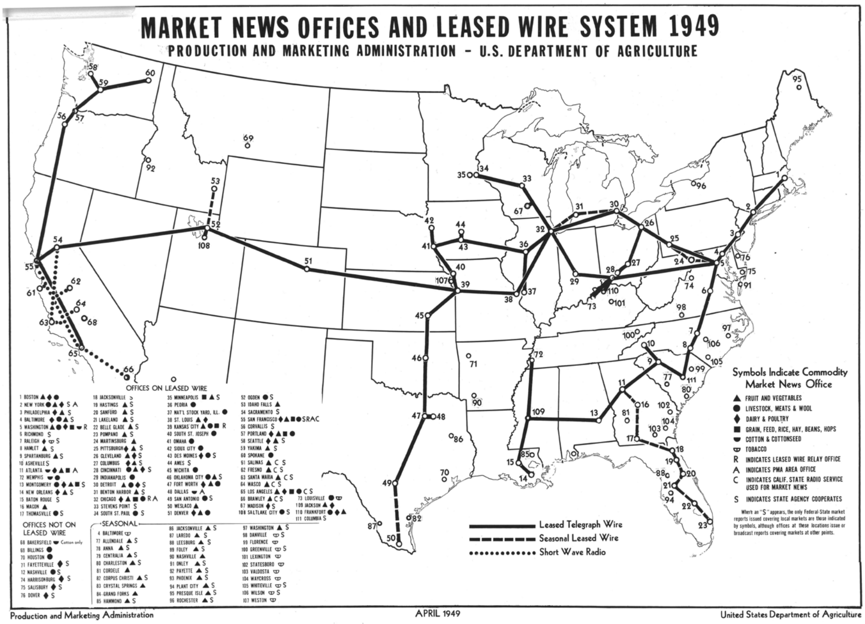

MARKET NEWS OFFICES AND LEASED WIRE SYSTEM 1949
PRODUCTION AND MARKETING ADMINISTRATION – U.S. DEPARTMENT OF AGRICULTURE
OFFICES ON LEASED WIRE
1 BOSTON ▲◆●
2 NEW YORK ●▲◆ S A
3 PHILADELPHIA ◆▲ S
4 BALTIMORE ◆●▲ S
5 WASHINGTON ▲●◆■◒ R
6 RICHMOND S
7 RALEIGH ◆◡ S
8 HAMLET ▲ S
9 SPARTANBURG ▲ S
10 ASHEVILLE S
11 ATLANTA ◒◆▲■ A
72 MEMPHIS ◒●
13 MONTGOMERY ●◆▲■ S
14 NEW ORLEANS ◆▲ S
15 BATON ROUGE S
16 MACON ▲
17 THOMASVILLE ● S
18 JACKSONVILLE S
19 HASTINGS ▲ S
20 SANFORD ▲ S
21 LAKELAND ▲ S
22 BELLE GLADE ▲ S
23 POMPANO ▲ S
24 MARTINSBURG ▲
25 PITTSBURGH ◆▲ S
26 CLEVELAND ▲◆ S
27 COLUMBUS ◆▲ S
28 CINCINNATI ●▲◆ S
29 INDIANAPOLIS ●
30 DETROIT ▲●◆ S
31 BENTON HARBOR ▲ S
32 CHICAGO ◆▲■● R A
33 STEVENS POINT S
34 SOUTH ST. PAUL ● S
35 MINNEAPOLIS ■▲ S
36 PEORIA ●
37 NAT'L STOCK YARD, ILL. ●
38 ST. LOUIS ▲◆
39 KANSAS CITY ▲●■ R
40 SOUTH ST. JOSEPH ●
41 OMAHA ●
42 SIOUX CITY ●
43 DES MOINES ◆● S
44 AMES S
45 WICHITA ●
46 OKLAHOMA CITY ●▲ S
47 FORT WORTH ◆▲●
48 DALLAS ◒ A
49 SAN ANTONIO ● S
50 WESLACO ▲
51 DENVER ◆▲●
52 OGDEN ● S
53 IDAHO FALLS ▲
54 SACRAMENTO S
55 SAN FRANCISCO ◆▲■● S R A C
56 CORVALLIS S
57 PORTLAND ◆▲■●
58 SEATTLE ◆▲ S
59 YAKIMA ▲ S
60 SPOKANE ●
61 SALINAS ▲ C S
62 FRESNO ▲ C S
63 SANTA MARIA ▲ C S
64 WASCO ▲ C S
65 LOS ANGELES ▲◆■● C S
66 BRAWLEY ▲ C S
67 MADISON ◆ S
108 SALTLAKE CITY ● S
73 LOUISVILLE ●◡
109 JACKSON ▲◆
110 FRANKFORT ●◆▲
111 COLUMBIA S
OFFICES NOT ON LEASED WIRE
68 BAKERSFIELD ◒ Cotton only
69 BILLINGS ●
70 HOUSTON ●
71 FAYETTEVILLE ◆ S
12 NASHVILLE ● S
74 HARRISONBURG ◆ S
75 SALISBURY ◆ S
76 DOVER ◆ S
SEASONAL
4 BALTIMORE ◡
77 ALLENDALE ▲ S
78 ANNA ▲ S
79 CENTRALIA ▲ S
80 CHARLESTON ▲ S
81 CORDELE ▲
82 CORPUS CHRISTI ▲ S
83 CRYSTAL SPRINGS ▲
84 GRAND FORKS ▲
85 HAMMOND ▲ S
86 JACKSONVILLE ▲ S
87 LAREDO ▲ S
88 LEESBURG ▲ S
89 FOLEY ▲ S
90 NASHVILLE ▲
91 ONLEY ▲ S
92 PAYETTE ▲ S
93 PHOENIX ▲ S
94 PLANT CITY ▲ S
95 PRESQUE ISLE ▲ S
96 ROCHESTER ▲ S
97 WASHINGTON ▲ S
98 DANVILLE ◡ S
99 FLORENCE ◡
100 GREENVILLE ◡ S
101 LEXINGTON ◡
102 STATESBORO ◡
103 VALDOSTA ◡
104 WAYCROSS ◡
105 WHITEVILLE ◡ S
106 WILSON ◡ S
107 WESTON ◡
Leased Telegraph Wire
Seasonal Leased Wire
Short Wave Radio
Symbols Indicate Commodity Market News Office
▲ FRUIT AND VEGETABLES
● LIVESTOCK, MEATS & WOOL
◆ DAIRY & POULTRY
■ GRAIN, FEED, RICE, HAY, BEANS, HOPS
◒ COTTON & COTTONSEED
◡ TOBACCO
R INDICATES LEASED WIRE RELAY OFFICE
A INDICATES PMA AREA OFFICE
C INDICATES CALIF. STATE RADIO SERVICE USED FOR MARKET NEWS
S INDICATES STATE AGENCY COOPERATES
Where an "S" appears, the only Federal-State market reports issued covering local markets are those indicated by symbols, although offices at these locations issue or broadcast reports covering markets at other points.
Production and Marketing Administration
APRIL 1949
United States Department of Agriculture

Figure 5.1. *Market News Offices and Leased Wire System 1949.* Production and Marketing Administration, USDA. National Archives, RG145-PMA, Box 2.

truckers. BAE field offices in several cities were actually located in the wholesale markets themselves, as they were at Gansevoort Market in New York City, the Chicago Produce Terminal, and the Los Angeles Union Terminal Market.[10] The BAE also enforced the Perishable Agricultural Commodities Act of 1930, which put commission merchants, dealers, and brokers in fruits and vegetables under federal license. In 1939, the BAE had nearly twenty thousand licenses in effect, it handled misbranding cases and arbitrated complaints against licensed members of the trade, and it returned more than $1 million to the treasury in license fees, making its regulatory work reportedly self-sustaining.[11] In short, no other organization—public or private—was better equipped than the BAE with the staff, resources, and business connections required to evaluate existing wholesale markets and to guide new projects for the flow of knowledge passed through its hands. Through radio, press, graphics, exhibits, motion pictures, and other forms of audio and visual education, combined with extensive informal contact relationships, the bureau was a "living encyclopedia of economic information" on the forces affecting the business of agricultural marketing.[12]

The Railroad Produce Terminal: Legacy of the 1920s

The September 1934 issue of *Architectural Record*, a leading magazine dedicated to modern architecture and interior design, introduced readers to the latest in wholesale market design with an article by Wells A. Sherman, chief of the BAE's Division of Fruits and Vegetables. An editorial preface introduced the article's theme as land-intensive enterprises that would be of particular interest to "architects or architectural groups who are undertaking the promotion of slum clearance and low-cost housing projects." Sherman, however, writing as a specialist in fruits and vegetables, was more interested in articulating a typology of wholesale markets whose standard physical development would vary according to latitude, population served, proportions of rail and truck receipts, and volume of local produce. He offered a critique of three kinds of wholesale produce markets prevalent in the United States by the 1930s: the railroad produce terminal, jobbing market, and regional growers' market. Sherman's objective in the article was to reach an audience of architects, city planners, and real estate developers with the tools they would need to evaluate proposed market projects and to consider the best alternatives.[13]

The railroad produce terminal had evolved from the late nineteenth-century freight terminals modified to handle perishable goods on a large scale with the addition of icing stations, cold storage, auction houses, and railroad sidings for direct carload sales. By the late 1920s, these were multimillion-dollar facilities, purpose-built by the railroads to control the carload trade in fruits and vegetables. Architects based their design principles on the simple goal of transferring fresh fruits and vegetables directly from railcars to sheds suitable for display and sale, or to contiguous stores or sales rooms for individual receivers. Depressed tracks positioned receiving platforms for incoming produce at car-door level. Truck platforms for deliveries and outgoing produce were usually at opposite sides of the shed or store and designed at tailgate height. Buildings were long in proportion to width, since tracks ran the entire length, and, in certain climates, covered or enclosed platforms protected produce from long exposure to the elements.

The Northern Ohio Food Terminal in Cleveland was an exemplary railroad produce terminal according to USDA standards, given its semi-industrial location with room for expansion and the facilities to handle out-of-state produce (fig. 5.2). Faced with a situation analogous to that of their counterparts in Washington and Chicago, the Cleveland wholesale merchants cooperated

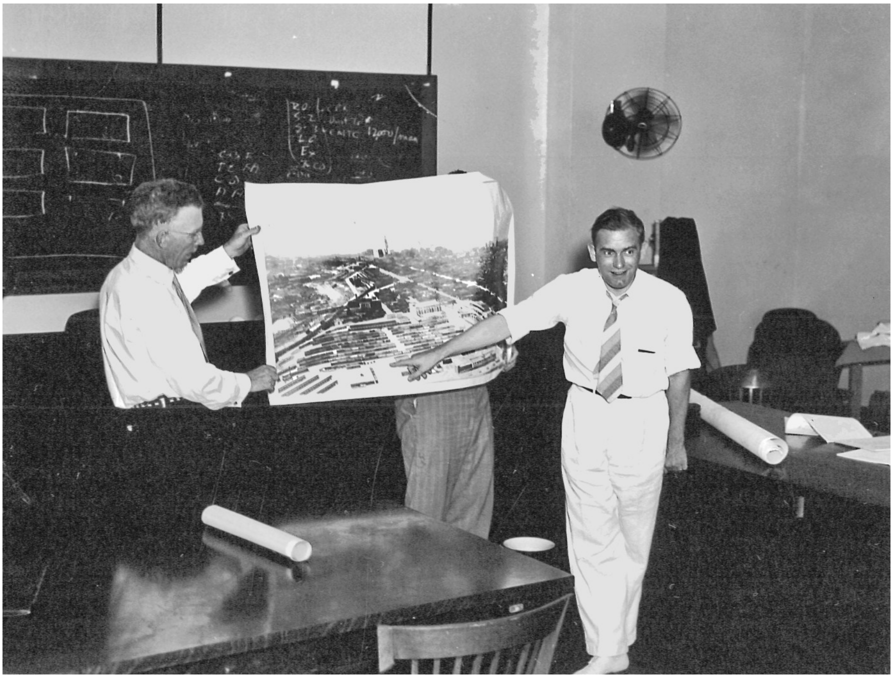


Figure 5.2. *William Crow Discusses Layout of the Northern Ohio Food Terminal with Farm Representatives of Five States, ca. 1938*. National Archives, RG83-G, Box 10.

with the Nickel Plate Railroad to build and operate a terminal on land adjacent to its right-of-way as they faced a forced move. The merchants made this decision while site preparation of the old produce district was under way for the new union passenger terminal. Their terminal project would involve the purchase of 228 separate parcels on twenty-five acres of land, the demolition of two hundred residences, and the closure of nine streets in preparation for the $6 million facility. Based on the plans of Wilbur J. Watson and Associates of Cleveland, the Northern Ohio Food Terminal opened on June 3, 1929, between East Thirty-Seventh and East Fortieth Streets, adjacent to Woodland Avenue. An eight-foot-high wire fence enclosed the complex, thus eliminating the expense of policing after business hours. Within its boundaries were four market buildings, an auction house, a cold storage plant, and a rail yard with a capacity of 410 railcars.[14]

Although Sherman found little criticism in the physical features of the Northern Ohio Food Terminal, he disapproved of its emphasis on rail delivery. Trucks bringing local and regional produce to the terminals used the farmers' sheds, which were unprotected and located in an awkward and isolated corner of the rail-centered site. Sherman also disapproved of the terminal limiting rail receipts to a single carrier, since the restriction only forced other carriers to establish their own markets.[15] This condition created "split markets," a redundancy of facilities one could find not only in Cleveland but also in Washington, Los Angeles, Philadelphia, New York, and Detroit. In Philadelphia, for example, when the B&O opened a $4 million produce terminal in 1926, the Pennsylvania Railroad followed six months later with a $10 million terminal. Likewise, in New York City, as soon as the Pennsylvania spent more than $2 million enlarging and improving its produce piers, the Erie followed immediately with its own major improvement.[16] In Detroit, even the best efforts to create a union terminal for produce failed to concentrate the city's perishable freight handled over the lines of the Michigan Central, Wabash and Pere Marquette, and Grand Trunk.[17] Although the railroads built produce terminals that were well designed and located with respect to the carrier and the trade, they forced other railroads, municipalities, and grower associations to establish competing markets. Adding to the redundancy were the chain stores that built their own warehouses on private sidings.

Sherman applied his critique of railroad produce terminals to the city of Buffalo, where the Niagara Frontier Food Terminal opened in March 1931 on a large tract of land on Clinton Street and Bailey Avenue in the eastern part of the city. The food terminal was another venture of the Nickel Plate and based on the railroad's Cleveland model. During the planning process, the local press reported: "Instead of the ancient dilapidated buildings in the old [Elk Street] market, the railroads are willing to provide modern, cement buildings. Instead of a market crowded into nine acres, as at present, the railroads are ready to provide a market site of forty acres."[18] Despite the praise, the Niagara Frontier Food Terminal failed to duplicate the "natural economic pressure working continually over a period of years" at the Elk Street Market downtown, where wholesale dealers colocated with the farmers' market. Not long after the Buffalo terminal opened, and without the participation of local growers, the farmers established their own cooperative market across the street from the terminal, on the south side of Clinton Street.[19]

The Chicago Produce Terminal: A Model Jobbing Market

Sherman defined the jobbing market as a purpose-built facility designed for wholesalers who owned their inventory. Unlike commission men, packers, and shipping agents, who did not take ownership of the goods, jobbers procured their stock directly from the producer and sold year-round from fixed stores to customers who were typically grocery store owners. The quintessential jobbing market was the Chicago Produce Terminal, built in 1927 and financed by jobbers who formerly occupied the historic South Water Street Market downtown. Marketing specialists considered it a model facility, noted for its physical plant, scale, ownership, financing, and especially its timing. Sherman, reflecting only a few years after it opened, opined in the midst of the Depression that "no trade group will in this generation attempt to finance another such structure," and few occupants were in a position to pay fixed rent for year-round stores.[20]

Sherman attributed the success of the Chicago Produce Terminal to its historical foundations, merchant-driven planning, private investment, and city mandate to locate outside of the commercial district. Like their contemporaries in Washington, DC, the Chicago produce merchants on South Water Street had fought a bitter battle against moving, but a court order settled the issue in January 1925.[21] Charles H. Wacker, chairman of the Chicago Plan Commission, had for more than a decade spared no harsh words for the old produce district on South Water Street. He considered it an economic waste, a burdensome expense to the public, a drawback to Chicago progress, an obstruction to the city's prosperity, and a conflagration hazard to the Loop district. He asked anyone who had never visited it to "imagine a combination barnyard and garbage dump."[22]

Yet the old South Water Street produce district was home to more than two hundred produce dealers who could not possibly relocate individually on such short notice. In order to guarantee their collective survival, sixteen of the most influential merchants formed the South Water Market Trust, which had the legal authority and financing options to secure land and new buildings.[23] Things moved swiftly after S. W. Straus & Company, a prominent Chicago investment house and creator of the real estate mortgage bond, offered the trust an $8 million loan. According to the bond prospectus, Straus considered the loan to be "an example of financial genius" and "the most important and interesting of all the thousands of loans made . . . in the 43 years of its history." In terms of dollar size, it ranked alongside his real estate loans for the Book-Cadillac Hotel and General Motors Building in Detroit, as well as the Straus Building in Chicago.[24] The firm also financed major skyscraper projects in New York City, including the Chrysler Building.[25] Straus conveyed to his bond salesmen, however, that the Chicago

Produce District offered a unique investment opportunity, for "in civic importance it leads all others." The old produce district had to be demolished in order to make way for "the boulevarding of South Water Street as part of the great Chicago Plan Commission program." Added to this imperative was the civic responsibility of moving the market without disruption to a more convenient location near the city's population center, railway terminals, and broad streets.[26]

With financing secure, the South Water Market Trust purchased an immense tract of land outside of the Loop in the Village District—a neighborhood "notorious as a center of criminal life and activity," where "tumble-down houses . . . could be bought for a song." The site covered eight square blocks bound by Racine Avenue on the west, Morgan Street on the east, Fourteenth Street on the north, and spur tracks of the Chicago, Burlington, and Quincy on the south. Demolition of the site proceeded at a rapid pace, and "the people living in the Valley clung so long to their ramshackle homes that the old houses were practically torn down over their heads."[27]

A rendering prepared by architects Fugard & Knapp and reproduced in the Straus prospectus provides a bird's-eye perspective of the "New Chicago Produce District." Visually, the rendering anticipates the aerial photography exploited later by developers of other large-scale, land-intensive projects. It presents six long and narrow buildings, three stories in height, grouped into two parallel rows of three. According to the specifications, "the buildings will be of reinforced concrete, with terra cotta face on the fronts and ends and brick facing on the rear walls. Dividing partitions will be of glazed, hollow tile. The front of the buildings will have loading platforms, with a 15-foot canopy made of glass on steel frames. The rear of the buildings will have a galvanized iron canopy of 12 feet wide. These canopies will extend the entire length of the sections. Each store will have its own freight elevator, steel stairways, toilet facilities, etc."[28] The buildings are separated by wide streets and alleys designed to provide ample parking and rapid movement of traffic. In total, the plan provided for 165 individual store units, 24 feet wide by 80 feet deep.

The plan's imagery depicts the new produce district as a utopian enterprise, a harmonious ensemble of uniform buildings with standardized stores, which according to the image caption are "scientifically planned to meet all the present day needs of the industry." The architects designed the buildings for an egalitarian distribution of goods, with each merchant having equal access to a loading dock, awning, and street, as well as an overhead office, cold storage room, and basement. Stationery vehicles engaged in the process of loading or unloading produce park in an orderly fashion, backed up against covered loading docks, with ample clearance of moving trains, trucks, automobiles, and streetcars. Noticeably absent are the horse-drawn vehicles, men with hand-trolleys, pedestrians, and stacks of produce that were hallmarks of the old South Water Street Market. This was the imagined produce district of the future, a place beyond the city center, where the industry could get the job done with room for expansion. The new produce district would be horizontal in orientation, free from the multistory buildings and downtown skyscrapers that were not conducive to moving and handling perishables. For all the middlemen engaged in the task, whether wholesale dealers, store owners, or farmers, the new produce district offered a consolidated place in a semi-industrial zone that buffered the transition from city to rail yard.[29]

The twenty-acre site earned the title of "Spotless Town" within a year. The buildings of concrete and glazed terra-cotta, and the wide streets, immaculate stores, and community facilities for storage, refrigeration, and offices represented a major private undertaking. Advocates promoted it as comparable in size and cost to the broader public improvements implemented by the Chicago Plan Commission, but "worth quite as much to the economic life of the people of Chicago."[30] Three million consumers were expected to benefit from hardworking middlemen who helped bring the products of the world to their dinner table. The American City Planning Institute declared it a dream come true, driving home the point with images of the old juxtaposed with the new market in its professional literature. The *Chicago Defender*, the African American daily, promised readers that the new nationwide jobbing market would deliver produce to the consumer "in much fresher condition."[31]

To the market's credit, its largest single buyer was the A&P food chain, followed by Hillman's and Stop and Shop. Had the dealers not banded together to establish the new terminal, these and other chain stores would have established competing warehouses and channels of distribution. Instead, the new Chicago Produce Terminal boasted a cornucopia of products for sale at a single location—everything that a food chain operator would want for his store. Writing of the market in the early years of the Depression, James O'Donnell Bennett, the well-known Chicago journalist and literary critic, emphasized the well-traveled produce that made its way to the market, such as lemons from Italy, grapes from California, and Florida oranges. According to Charles W. Irrgang, vice president and general manager of the Fruit Auction Sales Company, practically all buyers at the fruit auction were Jewish. Recent Italian immigrants patronized the market during the California grape harvest season, when they would buy fifty pounds of grapes that they then sold in box lots to winemakers. Although the Greeks were a minority in wholesale operations, they came to the market as representatives of Chicago's retail trade in order to buy stock for their grocery stores and confectioneries.[32]

Bennett also reported on the less obvious benefits of the market. Chicago Italians continued their rapid success in the city's wholesale food business. The firm of Garibaldi & Cuneo, for example, had already built its reputation at the old location on South Water Street before it became one of the leading wholesale dealers of imported fruits and nuts at the new terminal. The market also hosted classes and visitors from local universities, the army, and the navy, whose observers wished to study auction sales and the science of marketing. Lesser known to the public was the fact that the market supplied all of the produce for the Lincoln Park Zoo.

The State-Sponsored Regional Market

Given the unlikelihood of private financing during the Depression, Sherman concluded that a third type of wholesale market—the state-sponsored regional market—was the one most likely to gain traction. This type of market offered long-term stability and the opportunity for a maximum number of participants in the produce trade, including the independent truckers.[33] Regional markets were not exactly new in terms of their form and physical facilities, but public or cooperative ownership, inclusiveness for all carriers, regional breadth, and state support were their novel features. State market bureaus also treaded on new ground by directing resources, the architectural process, and the choice of cities that would receive state support for the construction of new facilities.

Sherman's article in the *Architectural Record* featured an aerial rendering of the Capital District Regional Market in Menands, New York, located between Albany and Troy. A cooperative of 615 farmer-members sponsored the private venture, which was one in a series of six regional markets planned by the State Department of Agriculture and Markets. The proposed location (where the market still operates today) was close to the Delaware and Hudson Railroad, the recently opened Troy-Menands Bridge, and the consumption centers of Troy, Watervliet, Cohoes, and Albany, whose combined population of 650,000 inhabitants offered a substantial market for fresh produce. The site plan showed a horizontal matrix of specialized buildings around a vast open parking lot with cars and produce trucks. According to building labels on the plan, access to the complex was through a single entrance, and one-way traffic navigated counterclockwise past the central administration building, auction building, and jobber stores. Spur tracks, buildings for shipped-in produce, and stores for butter, cheese, and eggs were at the rear of the complex. Stores marked for the "allied businesses," which included food and beverage processors, packagers, and distributors that catered to grocery stores, were at the end of the circular route, near the market's entrance and exit gate. Allied businesses offered a convenience to buyers of nonperishable items, as well as an important revenue source for the terminal.[34]

BAE chief Black echoed Sherman's optimistic view of regional truck markets in his 1935 annual report, stating that the motor truck had caused "more discussion and [brought] about greater changes than any other development in the marketing field." The business of trucking produce had been growing ever since the Bureau of Public Roads coordinated the construction of an extensive network of paved rural highways to serve farm interests. Between 1921 and 1930, state rural highway systems increased from 203,000 miles to 324,000 miles. Farmers invested in small trucks to haul their products to city markets and railroad depots, as they sought to gain an economic advantage by marketing their own goods rather than turning them over to the railroads. City buyers of bulk produce found it advantageous to purchase by the truckload instead of by rail, which often resulted in their receiving delayed or damaged goods. Best of all, the buyer or his agent could inspect the merchandise on sale, buy it on the spot for cash, and load it on his truck for immediate possession.[35] The availability of vehicles, improved farm-to-market roads, and proliferation of farm boys looking for employment away from the farms contributed further to making produce hauling an attractive profession. Chief Black claimed at a meeting of marketing officials at the Drake Hotel in Chicago that the current challenge was "how best to build our terminal and receiving facilities so that they will match the capacity of the transportation system." A big boost for agricultural trucking came from the Motor Carrier Act of 1935, which regulated unionized freight trucking across state lines but exempted carriers of unprocessed agricultural commodities.[36]

The increased use of the motor truck for hauling produce precipitated an interest in truck-friendly regional markets located near large farming areas.

In describing this kind of market, Dr. Waugh, head of the BAE's Division of Marketing Research, put it succinctly: "These are inexpensively constructed markets to which come for hundreds of miles trucks bringing produce and from which other trucks distribute this same produce over a wide territory." Optimal sites would have room for expansion, and phased construction would allow time for the market to attract tenants and suppliers.[37]

New York State had led the movement for regional markets since the 1920s, especially after Governor Franklin Roosevelt requested a study of city food distribution and its relation to the state's agriculture. The study, *Regional Market Needs in New York State* (1930), concluded that "the motor truck and modern highway have opened up new possibilities in the way of access to market for produce from New York farms," but inadequate facilities prevented the agriculture of the state from deriving the full benefits of this widening sphere for fresh produce. It recommended regional markets, where every hotel, restaurant, retail grocery, and fruit store in a defined geographical area could procure a complete line of produce. The expanding highway network shifted the lines of commerce away from rail terminals to ones built in less congested areas near commercial centers. The flexibility of the motor truck facilitated this movement. The 1930 study suggested the placement of regional markets in semi-urban sites, somewhere between the residential area and the commercial district of the city, where hotels and restaurants were located. It also emphasized locations that avoided heavily industrial settings and areas that handled nonperishable freight.[38]

The generic plan for a combined terminal and farmers' market in New York State, illustrated in the 1930 report, labeled the component parts of a complex that could accommodate various kinds of sales—retail, wholesale, and auction—as well as the facilities required for receiving produce by truck or rail. The farmers' section consisted of parallel sheds, including one labeled "winter market." The New York State Department of Agriculture and Markets was particularly interested in including a winter market, also known as "the Detroit market plan," which was nothing more than a steel-and-concrete shed equipped with rolling steel doors that provided a fully enclosed structure in the winter months. In sharing his drawings of the cruciform arrangement of sheds employed at Detroit's Eastern Market, George V. Branch, director of the Detroit municipal markets, noted the form's ability to equalize the selling advantage of the different stalls but recognized that it took up a lot of land. He thought that a series of parallel sheds was more desirable in the long run—a factor that featured in the combined terminal and farmers' markets designed by Harry E. Crouch, the marketing specialist who handled the planning and design of regional markets for New York State.[39]

Harry Crouch worked with the Cornell Agricultural College, farm bureaus, and other institutions to identify and develop state market districts that could host new facilities.[40] He based district boundaries on traditional marketing channels, soil types, and commercial crops—demonstrating an expertise in agricultural economics, agronomy, ecology, and land use. Newburgh, for example, was the heart of a hand-drawn map for the Central Hudson District, in which the Hudson River is the spine of the agriculturally productive counties of Orange, Ulster, Sullivan, Putnam, and Dutchess. The district extended not only into parts of the adjacent counties of Rockland, Westchester, Columbia, Greene, and Delaware in New York State but also into parts of the counties of Wayne and Pike in Pennsylvania, Sussex in New Jersey, and Litchfield and Fairfield in Connecticut. Seven areas of local supply were shaded accordingly: heavy fruit production, light fruit production (mostly apples), heavy vegetable production, light vegetable production, general farming (including dairy and poultry), muck lands (for onions, celery, and lettuce), and rough mountainous country. The state plan and boundary lines for the market district also considered the seasonal demand for fresh produce by the tourist trade, especially in the hotel-rich Catskills.[41]

Having identified Newburgh as an ideal site for a regional market, the state bureau proposed a new facility whose buildings and land would cost approximately $103,000 in 1928—a small price tag compared to the multimillion-dollar terminals built by the railroads. The proposed location had existing rails and took advantage of an abandoned barge canal terminal at the foot of Washington Street. State law permitted the city and state to split the cost, and the counties could participate financially should they so chose. Soon after the state legislature established the Lower Hudson Regional Market Authority in 1933, the state market bureau applied for Federal Emergency Relief Administration (FERA) funds to support construction of the Newburgh market based on the plans of Edward C. Smith, an architect from Poughkeepsie, with Harry Crouch as consultant. The cost was approximately $217,000, more than twice the 1928 estimate, owing to rising construction costs and the allocation of more space for income-producing facilities such as cold storage and buildings for wholesale grocers, chain stores, and allied industries. The final site was a landlocked plot on Dickson Street at Robinson

Avenue, since direct access to the barge canal was less critical than the need for more space for truck farmers. The market opened in May 1937 and put Newburgh on the map as a regional hub for New York produce.[42]

New York's aggressive plan of regional markets threatened growers in the neighboring states who had established relationships with buyers in the New York City markets. In 1937, the Connecticut Department of Agriculture, aware that superior facilities and volume offered at the markets in Newburgh and Menands, New York, might lure buyers away from its state, established a primary market for Connecticut produce in Hamden, just outside of New Haven.[43]

Boosting Food Supply Channels for Southern Produce

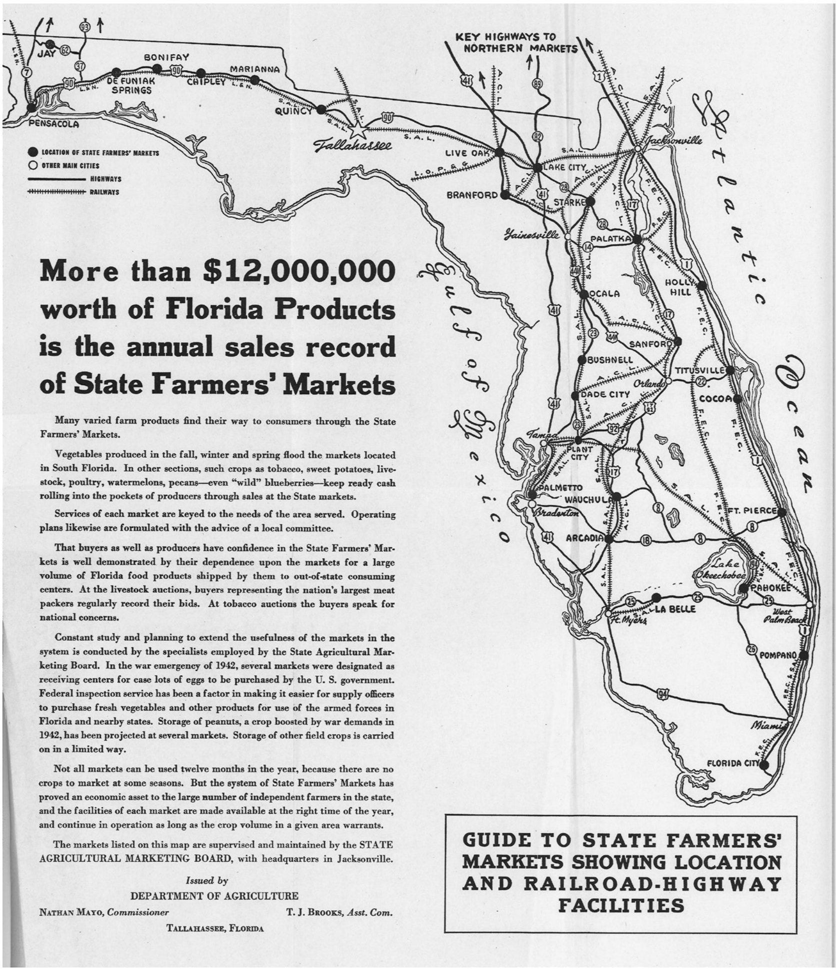
In an effort to boost agricultural marketing in the South, the BAE cooperated with agricultural colleges in the key states of North Carolina, South Carolina, Georgia, Florida, and Alabama, which were important suppliers of fresh produce for principal cities on the Eastern Seaboard, as well as for points in the Midwest, Texas, and California. William C. Crow began consulting in Georgia after Eurith D. Rivers, the two-term governor, ensured legislation that gave the BAE authority to approve plans for the state's wholesale markets, beginning with one in Atlanta. Located on Murphy Avenue and Sylvan Road (between Atlanta and East Point), the state farmers' market in Atlanta opened in 1941 and included six buildings for wholesalers (including two for tomato dealers), three sheds for farmers, and generous parking. Located close to rail facilities for three main lines and to highways leading into Atlanta, the market quickly became a model for others in the region.[44]

In December 1934, Florida's agriculture department dedicated its first farmers' market in the central region of the state, in Sanford, near Orlando. The Sanford market was the first in a system of five state farmers' markets funded by FERA and expected to generate sufficient revenue from platform fees and concessions to cover annual operating costs. Additional Works Progress Administration (WPA) funds contributed to its expansion the following year, when the state added a railroad siding, warehouse, and platform to increase the handling of out-of-state shipments of Florida produce. Work Projects Administration funds also contributed $246,000 to a new market in Plant City, Florida, near Tampa, which claimed in 1939 to be "the largest farmers market of its kind in the country."[45]

By 1941, Florida boasted twenty-eight markets for fruits, vegetables, livestock, tobacco, and other crops, which generated $8 million in sales during the fiscal year ending June 30, 1940. Each market had its own architectural style, buildings, and services based on local conditions and needs. Designed and constructed with the aid of the WPA and other agencies, no two markets were alike, and each one focused on marketing the specialty crop of the region or home products prepared in the community. The state erected large roadside billboards illustrated with the location of the markets on a map of Florida's highway system. One billboard encouraged produce haulers and potential buyers on the move to "patronize state markets," where "producer and buyer meet"—buyers meaning not the household consumer but anyone who would purchase state produce or bid for it at auction by the truckload (fig. 5.3).[46]

The success of state-sponsored wholesale markets depended not only on new facilities but also on personal contacts and agreements made between prominent growers and shippers, and the out-of-state jobbers who were willing to receive and market their produce. The *Chicago Packer* reported regularly in its column "New York Street Notes" on the Florida and California men who made personal visits to the markets in New York to promote their crops, which they could ship via the new state marketing facilities. William W. Stockbridge of Sarasota, Florida, for example, was a grower and shipper of celery whose visit to the New York markets made news. "After spending a couple of days on the market he left for Pittsburgh and will call on merchants in Buffalo, Cleveland, Detroit and Chicago before returning to his home in Florida." The same report in the *Chicago Packer* announced that "Joe Becker came in from California this week after spending several months in the growing and shipping sections of that and other western states. Mr. Becker states that the Associated Market Company, of which he is president, with headquarters at Sacramento, controls about 2,000 acres of lettuce, peas and broccoli, ready to move next spring."[47]

The BAE also facilitated formal marketing agreements between large growers and handlers who voluntarily agreed to quantity and quality regulations for specific commodities. In 1939, the Division of Marketing and Marketing Agreements was in its fifth year as overseer of the watermelon marketing agreement. This contract coordinated the marketing and inspection of watermelons in the four southeastern states of Florida, Georgia, South Carolina, and North Carolina. Each year, the US secretary of agriculture


KEY HIGHWAYS TO NORTHERN MARKETS
LOCATION OF STATE FARMERS' MARKETS
OTHER MAIN CITIES
HIGHWAYS
RAILWAYS
JAY
BONIFAY
MARIANNA
DE FUNIAK SPRINGS
CHIPLEY
QUINCY
PENSACOLA
Tallahassee
LIVE OAK
LAKE CITY
BRANFORD
STARKE
Jacksonville
Gainesville
PALATKA
HOLLY HILL
OCALA
SANFORD
BUSHNELL
TITUSVILLE
Orlando
DADE CITY
COCOA
Tampa
PLANT CITY
PALMETTO
WAUCHULA
Bradenton
ARCADIA
FT. PIERCE
Lake Okeechobee
PAHOKEE
LA BELLE
Ft. Myers
West Palm Beach
POMPANO
Miami
FLORIDA CITY
Gulf of Mexico
Atlantic Ocean
GUIDE TO STATE FARMERS' MARKETS SHOWING LOCATION AND RAILROAD-HIGHWAY FACILITIES

More than $12,000,000 worth of Florida Products is the annual sales record of State Farmers' Markets

Many varied farm products find their way to consumers through the State Farmers' Markets.

Vegetables produced in the fall, winter and spring flood the markets located in South Florida. In other sections, such crops as tobacco, sweet potatoes, livestock, poultry, watermelons, pecans—even "wild" blueberries—keep ready cash rolling into the pockets of producers through sales at the State markets.

Services of each market are keyed to the needs of the area served. Operating plans likewise are formulated with the advice of a local committee.

That buyers as well as producers have confidence in the State Farmers' Markets is well demonstrated by their dependence upon the markets for a large volume of Florida food products shipped by them to out-of-state consuming centers. At the livestock auctions, buyers representing the nation's largest meat packers regularly record their bids. At tobacco auctions the buyers speak for national concerns.

Constant study and planning to extend the usefulness of the markets in the system is conducted by the specialists employed by the State Agricultural Marketing Board. In the war emergency of 1942, several markets were designated as receiving centers for case lots of eggs to be purchased by the U. S. government. Federal inspection service has been a factor in making it easier for supply officers to purchase fresh vegetables and other products for use of the armed forces in Florida and nearby states. Storage of peanuts, a crop boosted by war demands in 1942, has been projected at several markets. Storage of other field crops is carried on in a limited way.

Not all markets can be used twelve months in the year, because there are no crops to market at some seasons. But the system of State Farmers' Markets has proved an economic asset to the large number of independent farmers in the state, and the facilities of each market are made available at the right time of the year, and continue in operation as long as the crop volume in a given area warrants.

The markets listed on this map are supervised and maintained by the STATE AGRICULTURAL MARKETING BOARD, with headquarters in Jacksonville.

Issued by
DEPARTMENT OF AGRICULTURE
NATHAN MAYO, *Commissioner* T. J. BROOKS, *Asst. Com.*
TALLAHASSEE, FLORIDA

Figure 5.3. *Guide to State Farmers' Markets Showing Location and Railroad-highway Facilities*. From *The State Farmers' Markets of Florida, Their Purpose and Aim*. Tallahassee, 1941.

approved a control committee of six growers and six handlers nominated by the trade to coordinate shipments to points north based on current crop conditions in the participating states. Representatives of growers and shippers negotiated marketing agreements at the USDA in Washington, DC, often coinciding with their travel to the spring meeting of the Atlantic States Division of the National Association of Marketing Officials. This occasion put them in direct communication with BAE staff members, who were always on the program agenda. The watermelon control committee used its direct line to the secretary of agriculture to argue for quality controls, such as an order eliminating shipment of melons lower than a modified US No. 1 grade. A 1939 issue of the staff newsletter of the BAE was happy to report to local employees "that watermelons will begin to move from central Florida about the middle of May."[48]

New Deal Markets in New York City

For the New York City market, most out-of-state growers, shippers, and members of the produce trade were still beholden to using rail transport for long-distance hauls, which often created gluts and low prices of perishable produce at city arrival points. Students of the problem, such as Marius P. Rasmussen from Cornell University, believed that the only way to temper supply was by getting federal support for the establishment of large union produce markets for both truck and rail, where dealers could move and market a large volume of produce.[49] Fiorello La Guardia put Rasmussen's idea to the test in New York City by pushing the boundaries of federal construction aid for markets during his administration. The three-term mayor (from 1934 to 1945) used his strong ties to President Franklin Roosevelt to attract millions of dollars in New Deal support to expand municipal markets for both the wholesale and retail trade. Shortly after taking office, La Guardia informed agriculture secretary Henry A. Wallace that he had appointed William Fellowes Morgan Jr. as markets commissioner for New York City and ensured that the Department of Markets would have the expertise, construction funds, labor, and architectural vision to get the job done.[50] The Department of Markets had been studying for years the portion of a consumer's dollar for produce that went to growers and shippers, retailers, transportation specialists, and other intermediaries, and it hoped to benefit the consumer by improving marketing facilities and curbing the abuses of racketeers.[51]

The first order of business was a proposed expansion for the Bronx Terminal Market, originally conceived in 1912 as a model produce terminal but for decades incomplete and an embarrassment to the city. The only structures on the site were a power plant and cold storage warehouse built in the 1920s during the administration of Mayor John F. Hylan. The Lombard Revival style of the warehouse exterior was plain and fortified, and reflected the building's practical function as a solid container for the long-term storage of food. The mammoth structure was a source of public criticism because the city took so long to build it, spent far more money on its construction than it would have cost to build the entire terminal years before, and because it left only a scaled-down version of the original 1912 plan.[52] The polite critics called it an "empty shell" or an "awful white elephant." On December 3, 1926, a writer for the *Herald Tribune* posed the question: "Of what use is a gold-plated Bronx Terminal Market where there is neither terminal [n]or market?"[53]

In 1934, the Department of Markets hired Samuel A. Oxhandler, Albert W. Lewis, and John D. Churchill to prepare plans for an expansion of the Bronx Terminal Market that would attract and consolidate the middlemen in ways that were both functional and revenue-producing. The plan's key features were two parallel rows of merchant stores, two stories high and numbering forty-eight in all, just south of the existing cold storage warehouse, and a building for retail stores, a bank, restaurant bar and grill, and hotel for farmers. Market tenants would include not only jobbers and commission merchants who dealt in perishable produce but also distributors of processed foods and beverages. The terminal would serve as a depot for a full line of goods and supplies for commercial buyers, such as hotels, grocery stores, and restaurants. Preconstruction leases, for example, were in process with Lees & Feldman, West End Brewing, New York City Finest Foods, Magnetic Food Distributors, Levy Brothers, Pelham Dairies, Eastern Wines, and Pacific Sugar.[54]

La Guardia cut the ribbon of the Bronx Terminal Market expansion on April 27, 1935.[55] Turner Construction was the contractor for the new stores, and federal relief workers installed the cold storage rooms, 17,000 linear feet of brine pipe, 10,163 feet of cork insulation, and 360 square yards of concrete flooring.[56] The architects linked the stores stylistically to the cold storage warehouse by repeating the same blind arch detailing, molded this time in concrete, along the parapet walls.[57] The new stores and the farmers' sheds, built exclusively with labor from the Civil Works Administration, added a human scale and dimension to the otherwise barren site, as did the flagship structure that opened in 1936. The latter, a polygon building at the high-profile corner of East 149th Street, Exterior Street, and River Avenue, announced the market's name and municipal ownership in bold letters—a promotional feature that the city employed at its other new market buildings of the period. After eighteen months in operation, the Department of Markets reported full occupancy of the merchant stores and a waiting list of potential tenants, and 3,829 carloads of farm produce (truck deliveries converted to carload equivalents by the BAE) had moved through the Farmers' Square in 1936.[58]

Another feature of the Bronx Terminal Market expansion was the Farmers' Square, whose open-air sheds could provide space for about three hundred trucks. According to an account of La Guardia's surprise inspection of the construction site, it was a last-minute addition. "There's space for a farmers' market," he mused. "There's the riverfront; that means lower transportation costs." Then, turning to Commissioner Morgan, he added: "Map that out for a farmers' market. Put in your requisitions and we'll have it ready in six weeks." Although most of the farmers came from New York State, the Department of Markets hoped that the Bronx Terminal Market would also attract farmers from New Jersey, Connecticut, Delaware, Pennsylvania, and Maryland.[59]

The Department of Markets also employed relief workers to rehabilitate the Washington Market and West Washington Market, and to clear sites and construct new retail markets in various parts of the city, such as the Essex Street Market, First Avenue Retail Market, and Thirteenth Avenue Retail Market.[60] In 1937, the Department of Markets managed $1,663,091 in WPA expenditures, as compared to its own municipal budget of $701,976. The city managed additional WPA expenditures to expand food market infrastructure under the auspices of the Department of Plants and Structures, Department of Docks, and the boroughs of the Bronx, Brooklyn, and Queens.[61]

As the Department of Markets continued its aggressive expansion, it added a new Fulton Fish Market building to its physical plant inventory in 1939. La Guardia posed for a press photo beside a three-hundred-pound halibut at the opening, proud of having invested in facilities for a trade that was such an important part of the city's economy and identity. The building's elevation is bold and geometric, void of decoration, and horizontal in layout. It provided ample parking in recognition of the increased use of trucks instead of delivery by ship and boats, and the exterior signage signaled municipal ownership. In commissioning Lewis and Churchill, architects of the Bronx Terminal Market and several city retail markets, the department created a distinct architectural style for its market buildings—a feature achieved and exploited by the architectural possibilities of reinforced concrete, prefabricated materials, and uniform signage.[62]

Riding the waves of federal aid for markets, La Guardia still held out for the big catch—a new terminal market in Lower Manhattan to replace the sprawling Washington Street Market produce district. At the request of La Guardia, agriculture secretary Wallace sent Frederick Waugh, chief of the BAE's Research division, and William C. Crow, the nationally recognized authority on urban markets at the BAE, to meet with La Guardia in 1938. Waugh and Crow were no newcomers to an idea that had been under serious consideration ever since Walter Hedden, their colleague at the Port Authority, unveiled his report on *Produce Terminal Requirements in the New York Area* in 1925. Hedden, by 1938 a well-known figure among specialists in the produce trade, welcomed the services of his USDA colleagues and announced that New York City had finally arrived at a strategic position to implement such a large project, now that "we have a Mayor in office . . . who wants to get results." Waugh chaired the mayor's committee with Crow, Hedden, and other familiar instructors and practitioners of marketing, such as Harry Crouch of the New York State Department of Agriculture and Markets, Professor Rasmussen of Cornell University, Professor L. W. Bevan of Rutgers, and city markets commissioner William Fellowes Morgan Jr. All agreed that input from the trade was essential. An elevation drawing prepared by Lewis and Churchill showed a three-story building with a long frontage capped by a central office building. The terminal was to provide 1,500,000 square feet of space for receiving, handling, and redistributing fresh produce, with ramps from the street level to the second and third floors accessible to trucks, as if the market "were on one level." The committee expected the staggering estimate of $30 million for the land and construction to save the trade $10 million per year on costs that were otherwise wasted on inefficiencies in current distribution practices.[63]

La Guardia got nowhere with the terminal market plan for Lower Manhattan. The USDA special report on the subject, published in 1940 and prepared by William C. Crow, Wendell T. Calhoun, and James William Park, explained some of the obstacles (fig. 5.4). First and foremost was a lack of consensus among the various interest groups, including the growers, railroad companies, truckers, labor organizations, wholesalers, jobbers, retailers, property owners, and consumers, all of which did not have the same economic goals. The property owners, for example, had a monopoly over location and were motivated to maintain the status quo. Their real estate holdings consisted of 487 stores, of which 267 handled fruits and vegetables. In addition, there were forty-six fruit and vegetable basements, of which twenty-six were for bananas only. Other tenants in rental property in the Washington Street produce district included forty-eight restaurants,

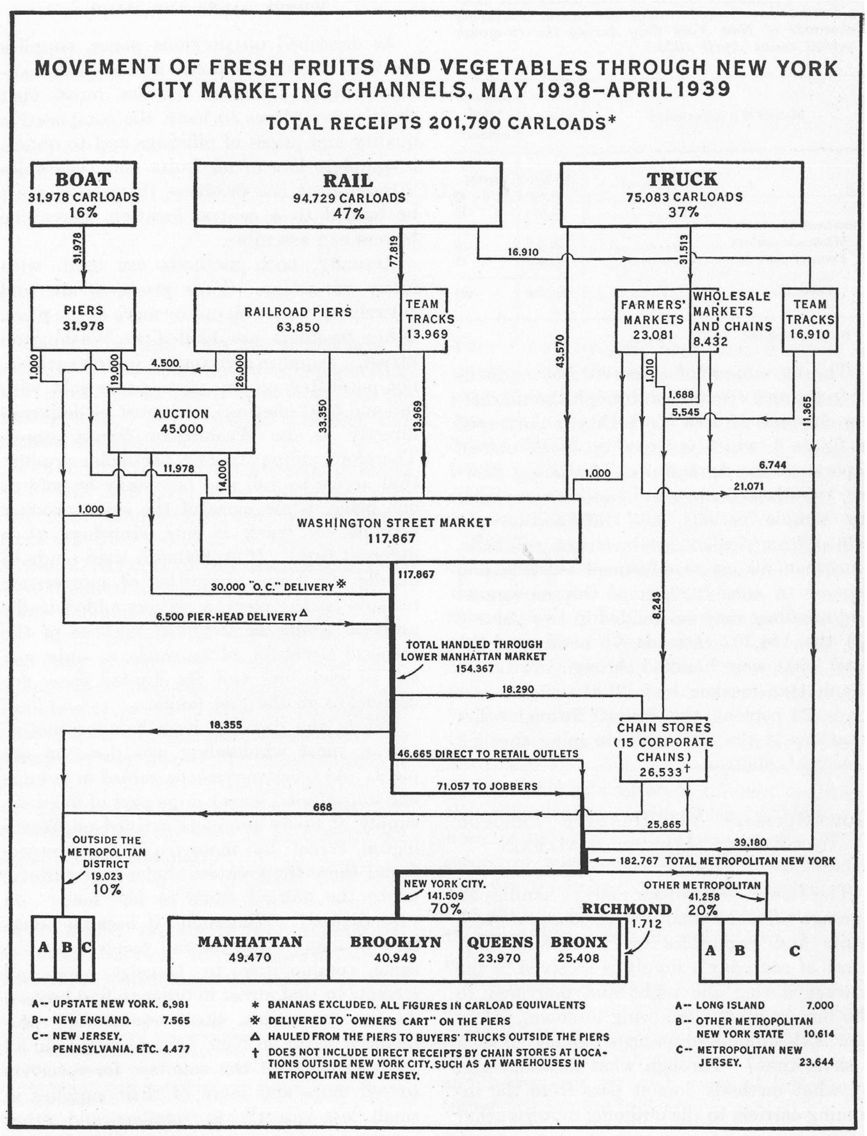

MOVEMENT OF FRESH FRUITS AND VEGETABLES THROUGH NEW YORK CITY MARKETING CHANNELS, MAY 1938–APRIL 1939
TOTAL RECEIPTS 201,790 CARLOADS*
BOAT 31.978 CARLOADS 16%
RAIL 94.729 CARLOADS 47%
TRUCK 75.083 CARLOADS 37%
31.978
77.819
16.910
31.513
PIERS 31.978
RAILROAD PIERS 63.850
TEAM TRACKS 13.969
43.570
FARMERS' MARKETS 23.081
WHOLESALE MARKETS AND CHAINS 8.432
TEAM TRACKS 16.910
1.000
19.000
4.500
26.000
1.010
AUCTION 45.000
33.350
13.969
1.688
5.545
11.365
11.978
14.000
1.000
6.744
21.071
1.000
WASHINGTON STREET MARKET 117.867
117.867
30.000 "O. C." DELIVERY ※
8.243
6.500 PIER-HEAD DELIVERY △
TOTAL HANDLED THROUGH LOWER MANHATTAN MARKET 154.367
18.290
18.355
CHAIN STORES (15 CORPORATE CHAINS) 26.533†
46.665 DIRECT TO RETAIL OUTLETS
71.057 TO JOBBERS
668
25.865
OUTSIDE THE METROPOLITAN DISTRICT 19.023 10%
39.180
182.767 TOTAL METROPOLITAN NEW YORK
NEW YORK CITY. 141.509 70%
OTHER METROPOLITAN 41.258 20%
RICHMOND 1.712
A B C
MANHATTAN 49.470
BROOKLYN 40.949
QUEENS 23.970
BRONX 25.408
A B C
A-- UPSTATE NEW YORK. 6.981
B-- NEW ENGLAND. 7.565
C-- NEW JERSEY, PENNSYLVANIA, ETC. 4.477
* BANANAS EXCLUDED. ALL FIGURES IN CARLOAD EQUIVALENTS
※ DELIVERED TO "OWNER'S CART" ON THE PIERS
△ HAULED FROM THE PIERS TO BUYERS' TRUCKS OUTSIDE THE PIERS
† DOES NOT INCLUDE DIRECT RECEIPTS BY CHAIN STORES AT LOCATIONS OUTSIDE NEW YORK CITY, SUCH AS AT WAREHOUSES IN METROPOLITAN NEW JERSEY.
A-- LONG ISLAND 7.000
B-- OTHER METROPOLITAN NEW YORK STATE 10.614
C-- METROPOLITAN NEW JERSEY. 23.644

Figure 5.4. *Movement of Fresh Fruits and Vegetables through New York City Marketing Channels, May 1938–April 1939.* From William C. Crow, Wendell T. Calhoun, and James William Park, *A Special Report: The Wholesale Fruit and Vegetable Markets of New York City.* Washington, DC: USDA, BAE, 1940.

twenty-nine dealers in butter and eggs, seventeen trucking concerns, twelve warehouses, nine package stores, five telegraph offices, sixty-nine for miscellaneous users, with thirty-one stores vacant. Added to the complexity of property ownership, tenancy, and the absence of any unified management were physical constraints on making any considerable improvements or expansions to the exiting market district. Washington Street was a thirty-foot-wide spine surrounded by continuous rows of tall buildings, thus forming a deep and narrow canyon that was often impenetrable to traffic and certainly to light. West Street was nearly two hundred feet wide and separated the market from the piers, which created another set of problems for the efficient movement of produce from the waterfront to the stores. As the city's great west-east arterial highway, it carried a heavy volume of nonmarket traffic day and night.[64]

Two recommendations in the 1940 USDA report were indicative of the changes to come. First, since a new union terminal market for produce would have a monopoly of location, the USDA recommended the establishment of a public authority—administered by New York, New Jersey, and perhaps even the federal government—that would operate the market for the public welfare.[65] Second, the USDA recommended a location outside of the already-congested city. It saw no particular reason why the Washington Street produce district should occupy "this high-priced land of Manhattan, except that it has continued in this location since the early days of the city's development." The only way to improve the market was to construct a new one elsewhere. Articulating an architectural vision, the report also noted that it was not practical to market fruits and vegetables in multistory buildings. "Therefore, high costs for land cannot be distributed over many floors as is the case with the great loft and office buildings now prevalent in this part of Lower Manhattan." Since the market district could not expand vertically, as indicated by the unused upper floors of the present market buildings, the only option was to locate a relatively large tract of land where the market could "spread out horizontally." The USDA offered to work out a specific solution "with any duly constituted agency which may be created to carry out plans for market improvements in New York City."[66]

At least three more studies for a new produce terminal followed the USDA report in quick succession, again with no results. The Hedden-Morgan plan, submitted to Mayor La Guardia in October 1940, proposed a $10 million terminal for the west side of Lower Manhattan, between Piers 22 and 29. Harry Crouch, of the New York State Department of Agriculture and Markets, prepared a plan at the request of the State Farm Bureau in 1941. His plan mirrored Crow's 1940 report in recommending substantial acreage as well as access to water transportation. Then, in October 1943, the Department of Public Works, in cooperation with the Department of Markets, awarded a contract to the engineering firm of Madigan-Hyland to consider—yet again—a wholesale market on the lower west side. Their proposal anticipated a reduction in the volume of fresh fruits and vegetables handled in Lower Manhattan and recommended a new facility designed to handle frozen foods.[67]

When wartime brought temporary closure to new construction projects, New York could still claim itself a major beneficiary of New Deal support for marketing facilities, even without a new terminal in Lower Manhattan. New York stood out, even among the big cities, in getting federal construction aid since it had already had well-developed plans for new public works projects (including markets) well before the New Deal and even before the Depression. With a seasoned markets department at hand, La Guardia kept open the channels of communication with Washington and the federal aid that came with it. He secured WPA labor for modernizing the city's market infrastructure, including a face-lift for the landmark Washington Market—the public retail market house that anchored for the wholesale produce district around Washington Street. By establishing a precedent and expectation for federal involvement in matters of marketing in the nation's largest consuming center, La Guardia secured federal oversight of the city's market expansion in the postwar years.[68]

Federal Support for Philadelphia

New York's aggressive stance to expand the urban marketplace for fresh food made rail carriers in other large cities nervous that the carlot trade in long-distance produce would bypass their own terminals for better facilities in New York. Philadelphia jumped into the race for federal assistance in 1934 with a private venture whose proposed $4.5 million facility would be "the best equipped marketing center along the entire eastern seaboard." The brainchild of real estate developer Frank C. Binswanger, the plan sought a $3 million loan from the WPA with the promise that the enterprise would employ more than two thousand workers. An illustrated brochure for members of the trade and rental agents highlighted the design of the architect Grant M. Simon. The project called for 361 stores spread among twelve buildings and a twenty-story air-conditioned office building. The market would cover thirty-five acres on the site of the old Pennsylvania salt works at

Delaware and Oregon Avenues, near the freight terminals of the Pennsylvania and the B&O, the Reading Produce Terminal, and the General Cold Storage Company.[69]

Objections to the proposal came from the many trade organizations that had a stake in the Dock Street and Callowhill markets. Representatives of the Philadelphia Chamber of Commerce, National League of Commission Merchants, Philadelphia Produce Exchange, Philadelphia Perishable Carlot Receivers Association, and Philadelphia Live Poultry Association appeared at the hearing in the State Capitol in Harrisburg to oppose the Public Works Administration (PWA) loan. Also in attendance were the property owners affected by a possible relocation of the wholesale trade from its current location. Even the city comptroller spoke out at the hearing against the federal loan, because of the expected loss in tax receipts that would result from abandoned property at Dock and Callowhill. E. S. Woodward, head of the Wholesale Fruit and Vegetable Jobbers Association, claimed that if a move from Dock Street and Callowhill would become an economic necessity, the trade was fully capable of initiating their own project, since the jobbing trade had initiated and created the present terminals in the first place. Woodward and other opponents at the hearing made the bold claim that "a produce market is not a tangible object which can be picked up bodily and set in a new spot but rather a market is the result of years of natural growth and development."[70] He announced that the Philadelphia jobbers would work with their counterparts in New York to develop regional codes for total working hours, opening of selling hours, and other policies that had advantages for the trade in both cities. They would also consider the needs of the city's food retailers in terms of optimal selling hours and the possibility of establishing smaller nearby markets for their supplies.[71]

Local officials tabled the Philadelphia terminal plan for the same reasons they declined federal support for the city's stressed municipal water system. The Republican-dominated city government restrained public spending during the New Deal for fear that Roosevelt and local Democrats would gain favor. The terminal plan also lacked a firm commitment from the Pennsylvania Railroad, on which its success would have depended. According to one cynic, "The Port of New York, as the nation's biggest and best, gets the cream of the Pennsy's business; Philadelphia, the skim milk."[72]

Nonetheless, pressure for a consolidated wholesale market in Philadelphia at or near the railroad terminals did not go away, especially after the BAE released its report on the city's wholesale markets in 1936—a report that consumers could request free of charge. The 1936 Philadelphia report, prepared in cooperation with the New Jersey State College of Agriculture and Pennsylvania State College, highlighted the problems associated with a food marketing system that had been dependent on the old Dock Street and Callowhill markets for too long. The crowded, narrow streets could not accommodate the large trailer trucks that moved a significant portion of the produce; makeshift solutions were unsatisfactory; and the city could not afford to postpone improvements. The report also cited the 1935 strike of the Brotherhood of Transportation Workers as a further incentive for action. The truck drivers union, realizing the strategic importance of Dock Street to the city's food supply, held a strike against the owners of their trucks, the Perishable Fruit and Produce Haulers Association, which caused prices to soar while shippers left fruits and vegetables to rot at the docks. Although the strike ended after a few days, the report cited that the city could have avoided the strike if it had built a new terminal based on scientific planning and located near rail service on the outskirts of cities. There, business could be consolidated, convenient to out-of-town buyers, and open to all suppliers, dealers, and truckers of regional truck produce.[73]

Philadelphia wholesale dealers had other reasons to remain concerned about the future of their trade, since mass distributors were bypassing their markets for lack of adequate access and facilities. Local buyers were content with current markets since they did not purchase in sufficient volume to warrant traveling outside of the city or to receive directly from producing areas. However, the out-of town buyers and chain stores materially gained from truck transportation and used its flexibility to purchase large quantities directly from producing areas. Four chain store warehouses located in central Philadelphia supplied their own outlets in the city and distributed an estimated 45 percent of their stock to out-of-town stores. The future of Philadelphia's wholesale markets would depend on maintaining the business of these buyers. The magazine *Nation's Business* echoed a similar conclusion and encouraged growers and shippers to welcome a single solution, calling for "one big market on [the] outskirts of [the] city where rail and truck facilities can be provided—where a merchant can make all his purchases without driving from one market to another in search of various commodities."[74]

A Universal Problem in Large Cities

The challenge for Philadelphia was part of a larger problem facing most large cities in the United States—a message that William Crow, codirector of the

Philadelphia study, pushed in his widely circulated and cited report *Wholesale Markets for Fruits and Vegetables in 40 Cities*. Published by the USDA in 1938, Crow's report took on a life of its own, and students and planners of urban food systems cited it in the literature for years to come. It was succinct and manageable in length, well illustrated, and timely, given the flurry of interest among cities seeking federal aid for improved marketing of fruits and vegetables. Crow opened the report with a historical summary of urban food markets in the nation, followed by forty full-page maps in alphabetical order by city, from Atlanta to Washington, DC. Each map identified the location of the city's wholesale markets and chain store warehouses and railroads, provided the names of principal streets and landmarks for visual orientation, and included a chart listing the volume of business by markets and chain stores.[75]

The foreword by BAE chief Albert G. Black cited the universal need for large cities to reorganize or reconstruct their wholesale and jobbing markets for perishable agricultural commodities. Black called on all cities to make intensive studies of their local situation and to prepare a program for improvement in cooperation with members of the trade. "If this is not done, it is probable that city, State, and Federal Governments will have to play a larger and larger part in the planning improvements and in regulating marketing methods." Crow was also emphatic that change would require group action. As a seasoned observer of city markets, he believed that the efficiency of markets could improve if state agencies conducted a careful analysis of local needs with the full support and advice of farmers, local officials, wholesalers, jobbers, retailers, consumers, railroads, and other interested groups.[76]

Crow did not hesitate to cite specific markets by name in order to make a point about the problems facing cities. He frequently cited Philadelphia's Dock Street Market in order to illustrate waste and inefficiencies in food handling at a waterfront market that predated rail and truck service. Cobblestone streets originally designed for horse and wagon served produce trucks that were as long as the street was wide, and in a city whose population had increased 2,100 percent since the market was established. Similar "defects" were inherent in other markets established in the nineteenth century, most notably Faneuil Hall Market in Boston, the French Market in New Orleans, and Washington Street Market in New York. Crow emphasized and illustrated the defects of older markets that were not conducive to modern forms of distribution (fig. 5.5). Just as problematic, however, were some of the newer markets, which lacked either direct rail connection or facilities

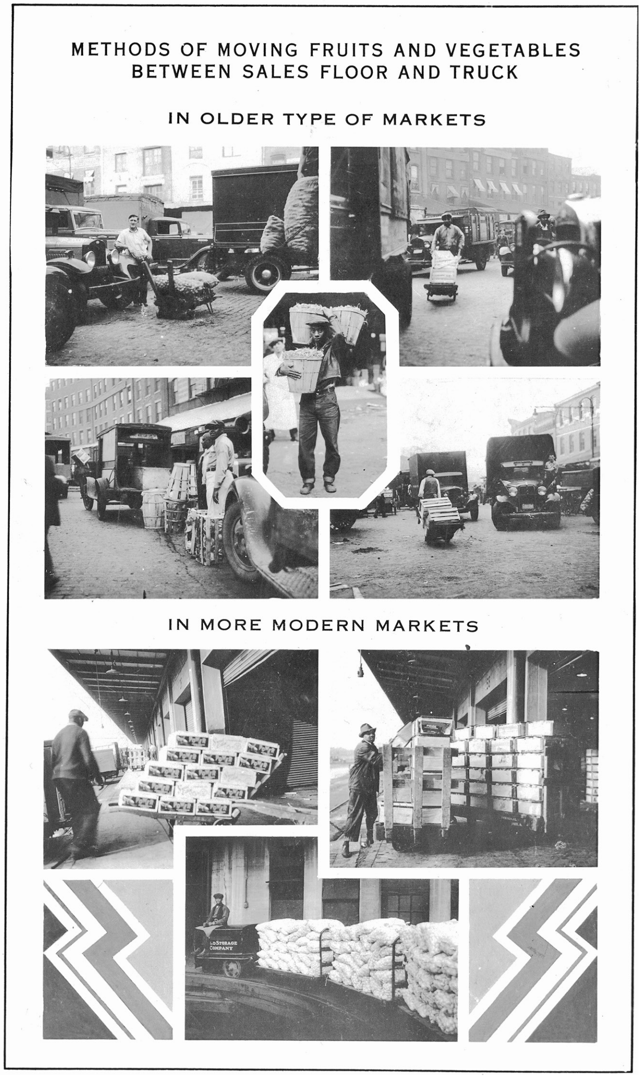

METHODS OF MOVING FRUITS AND VEGETABLES BETWEEN SALES FLOOR AND TRUCK
IN OLDER TYPE OF MARKETS
IN MORE MODERN MARKETS

Figure 5.5. *Methods of Moving Fruits and Vegetables between Sales Floor and Truck.* From William C. Crow, *Wholesale Markets for Fruits and Vegetables in 40 Cities.* Washington, DC: USDA, BAE, 1938.

for receiving produce by truck. For example, when Center Market in Baltimore opened in 1907, it was a state-of-the-art facility for its time, but by the 1930s, it could not accommodate with efficiency the increased volume of truck receipts. Washington's Union Terminal Market, which opened in 1931, lacked a railroad siding with direct connection to the nearby B&O tracks. The

Chicago Produce Terminal, “the last word in planning an efficient market,” was located near a railroad but not close enough to avoid trucking costs. Even the premier terminal markets—the Northern Ohio Food Terminal in Cleveland and the Niagara Frontier Food Terminal in Buffalo—had rail facilities that stopped one hundred feet short of the nearest wholesale and jobbing houses, necessitating truck hauls from the cars to the stores.[77]

The list of defects in the old markets included increased labor, waste of time, high operating cost, inadequate merchandising, unnecessary handling, exposure to unsanitary conditions, large losses from spoilage, and other expensive factors that by USDA estimates cost the system $1.5 million. Crow alerted city dealers to another factor that might encourage them to move to new quarters outside of the city center. USDA unload reports indicated a decline in the volume of produce passing through large city wholesale markets, as chain stores and other large buyers purchased their produce direct from growers. In 1936, eleven chains operating in New York City accounted for 47 percent of incoming receipts of fruits and vegetables and distributed 10 percent of their receipts to out-of-town stores. Chicago’s five chains accounted for 20 percent of incoming receipts and distributed 30 percent to out-of-town stores, and Philadelphia’s four chains received 16 percent of the city’s total volume of incoming fruits and vegetables and distributed 45 percent to out-of-town stores.[78]

The biggest player among the food chains was the Great Atlantic and Pacific Tea Company, the world’s largest retailer, with sixteen thousand stores whose sales reached $2.9 billion in 1930. The Atlantic Commission Company, its produce-wholesaling subsidiary, purchased thousands of carloads of produce each year directly from farmers who had signed contracts to grow crops for A&P, in addition to buying on the open market. With a fleet of company-owned trucks and refrigerated railcars, the Atlantic Commission Company cut handling costs by circumventing brokers and wholesalers, sending produce straight to its warehouses, and avoiding the delays involved in moving fresh produce through the “archaic” city wholesale markets, such as the Washington Street Market in New York.[79]

Crow’s principal reason for alerting the dealers to the growing buying power of the chains was not to fear them but to cooperate with them. As a spokesperson for the BAE’s goal of improving agricultural marketing through better facilities, Crow viewed the chains not as a threat but as an opportunity. His strategy was to entice city dealers to move from their existing quarters to a single large facility with room for expansion, where they could carry on their business alongside and in cooperation with the chains. He hoped that new markets, properly planned and designed, would attract all kinds of intermediaries in the food industry. Given that such markets would form a natural monopoly, it was in the public interest to operate them as a public utility, similar to grain elevators, public warehouses, stockyards, and electric companies.[80]

Crow's service as a consultant was in high demand after the BAE released his report, and Frederick Waugh, his division chief, authorized him to travel to cities whose plans for new terminals might justify federal aid. Crow's itinerary included the twin cities in Missouri and Kansas that vied for PWA loans for new terminals. Although he advised against split markets and encouraged the states and cities to work out a cooperative solution, namely a terminal authority to operate a single market, they did not take his advice.[81] Defenders of the Kansas City, Missouri, market received federal construction aid, and despite its cancellation following revelations of the illegal activities of Tom Pendergast, the city's infamous boss and political figure, it proceeded with construction anyway in 1938.[82] The city bulldozed everything in the old City Market area, including the city hall, police station, and fire station. It demolished the two- and three-story brick buildings on Fourth Street occupied by produce dealers and other commercial establishments. In their place was a new market complex designed by city architect Frederick C. Gunn (1863–1959). Although it offered new brick stores for wholesalers and outdoor sheds for farmers, the location offered little room for expansion, and it did not cater to wholesalers who dealt in the carlot trade.[83]

At the same time, Joseph DeOreo of Cleveland and William Fean of Columbus organized a competing terminal in Kansas City, Kansas, with backing from the city and the Union Pacific Railroad.[84] DeOreo and Fean induced the Union Pacific to sign on as an exclusive carrier at the proposed terminal if the city were to obtain financing for its construction with a PWA grant.[85] The plan required committed tenants, so the railroad representatives offered rent abatements to the Missouri dealers as inducements to move to the Kansas terminal. This arrangement, however, raised a possible violation of the Elkins Act, and the Kansas terminal opened on December 4, 1939, under litigation. Even though the Supreme Court decision in 1941 ruled in favor of Union Pacific, the litigation had left Kansas City, Kansas, with fine physical facilities for a fruit and vegetable terminal but no business for it. The same decision found Kansas City, Missouri, with business but with inadequate facilities.[86]

In Denver, the railroads, growers, and city government created competing terminals, much to the chagrin of the USDA. Initially, the city received a $64,000 PWA construction loan for a municipal wholesale market but returned the payment after five railroads (Colorado and Southern; Denver & Rio Grande Western; Atchison, Topeka and Santa Fe; Chicago, Rock Island & Pacific; and Chicago, Burlington & Quincy) collaborated on a new terminal in the Auraria section of Denver on Wazee Street, between Ninth and Thirteenth Streets.[87] The Wazee Market opened on August 1, 1939, and catered primarily to the carlot trade for produce arriving by long distance, including bananas that could be stored and ripened in a purpose-designed plant.[88] The terminal, however, was not conducive to truck traffic for local produce, so the disgruntled truck farmers organized the Denargo Market, located on thirty acres of land at Twenty-Ninth Street and Broadway. Joseph DeOreo, the same agent for the Union Pacific who promoted the Kansas City terminal, assured jobbers and truck farmers that the Denargo Market would have access to the Union Pacific railway. Both projects—the Wazee Market built by the railroads for the long-distance carlot trade and the Denargo Market for truck farmers—marked the end of Denver's long-standing municipal oversight of wholesale markets.[89]

Federal support for city marketing during the New Deal was uneven and had mixed effects depending on local circumstances, but overall it elevated and secured federal involvement in urban food systems planning. Direct federal aid went beyond the planning of new terminals to encompass other projects intended to improve the wholesale marketing system as a whole. Such projects ranged in scope from a new municipal cold storage plant in Mobile, Alabama, and an ice-making plant for the state fish wharves in Gloucester, Massachusetts, to pier sheds at the Embarcadero in San Francisco, whose mammoth facilities handled coastwise cargo.[90] PWA support also financed new retail public markets, not only the ones established in New York during the La Guardia administration but also the City Market in Nashville, the French Market in New Orleans, the Municipal Market in Austin, and the Farmers' Market in Shreveport, Louisiana. Benefit to the community was the basis of eligibility for funding, and the recommended building style paid homage to the prevailing local style for civic architecture. Even the historic nineteenth-century market houses, often ridiculed as inefficient and outdated, received support for physical improvements to help boost business for wholesale merchants. WPA funds, for example, provided Boston with support to rebuild the dome of Quincy Market in 1935, and the following year the city renovated meat stalls in the east end of the market with a PWA loan of $500,000. In New Orleans, the French Market Corporation added a seafood shed for wholesalers on the river side of the market with a $30,000 PWA loan, fitting the concrete building with modern drainage, a sewerage system, and sales counters and iceboxes that met "all sanitary requirements of federal, state, and city health authorities."[91]

Picturing Food Wholesaling

Under the New Deal, the BAE did not have the authority to build new wholesale markets, but it led the campaign for improved marketing facilities based on new types of ownership, location, notions of scale, and operation. Equally noteworthy but less recognized in this effort were New Deal artists, photographers, and writers who also communicated the importance of new wholesale markets to the general public through their respective media. A poster sponsored by the Federal Art Project in 1936 or 1937 offered a literal definition of a wholesale market in its caption that reads, "This is the market where the storekeeper buys the food and brings it to his store near your house" (fig. 5.6). The poster, produced at the peak of New York's campaign for new market terminals, addressed the household consumer. In the foreground stands a hand trolley and crates of produce next to a stake truck backed up to a wholesale store with the characteristic awning. At right, sacks of produce are stacked on the open, ground floor of a warehouse. Three containers in an open railcar, probably on a car float, are visible in the middle ground. Passing by in the background is a double-stack ocean vessel, which evokes traffic on the Hudson River. Both text and iconography combine to educate the viewer about unified produce terminals designed to accommodate rail, truck, and water transport. While such markets were de-facto off-limits to the average consumer in the physical sense, they served the consumer indirectly by providing a place where the storekeeper could buy fresh provisions to stock the store.

Photographers in the Farm Security Administration and later the Office of War Information (FSA-OWI) were also instrumental in promoting the benefits of wholesale markets during their campaign to picture American life between 1935 and 1944. Historians have largely recognized them for their reportage on the destructive social and environmental consequences of large-scale corporate agriculture on farming communities. Equally noteworthy but less well known are their photographs epitomizing the positive features of cooperative marketing—which included attractive merchandising,

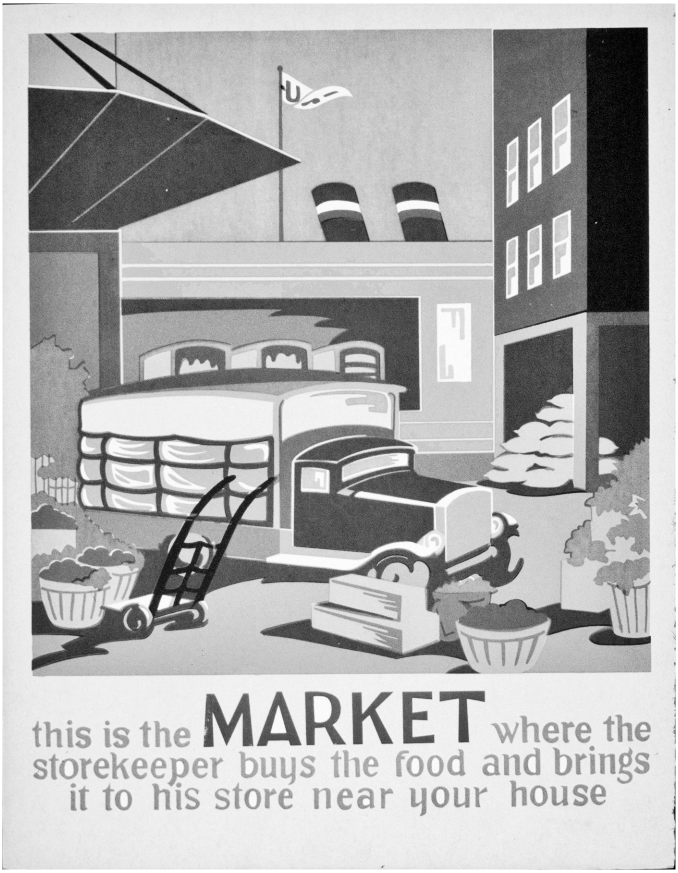

this is the MARKET where the storekeeper buys the food and brings it to his store near your house

Figure 5.6. Poster, *Federal Art Project, 1936 or 1937.* Library of Congress, Prints and Photographs Division, WPA Poster Collection, LC-USZC2-999.

the use of standard containers, adequate storage facilities, goods open for inspection by the customer, and sanitary practices in the proper handling of perishable food. In 1936, for example, the same year that Dorothea Lange photographed destitute farmers in the heartlands, she was in Washington, DC, where she documented a temporary farmers' market near Fifth and K Streets NW that absorbed some of the vendors displaced by the Center Market demolition. Lange captured the essence of direct marketing, clearly marked prices, and goods open for personal inspection. Her images also emphasized abundance—everything from local turkeys, eggs, and domestic melons, to tropical fruits such as pineapples. Likewise, in 1942 photographer Marjory Collins was on assignment in Washington in order to document several food-related subjects including wartime rationing, the new self-service market handling at the Giant Food Store chain, and lunchtime in the wartime capital. Collins photographed action at the Municipal Farmers' Market in Southwest Washington, where she captured images of produce haulers unloading a truck of watermelons, dealers and stacked produce under the shade of the market shed, and farmers and their helpers shelling beans, shucking corn, dusting off melons, and performing other activities associated with the preparation of food for market.[92]

John Vachon, working with his Leica camera in Michigan, photographed the wholesale fruit market at Benton Harbor, where he covered everything from the housing conditions for seasonal labor, also known as "fruit tramps," to the truck growers who queued at the market (fig. 5.7). Vachon's captions described the process of growers paying a ten-cent entrance fee at the gate. If their produce was not sold, they were permitted to enter through the gate and line up again for another chance.[93] Vachon treated his photographs in series that documented various stages in the marketing process, as he also did on assignment at the South Water Market in Chicago. Vachon reported to

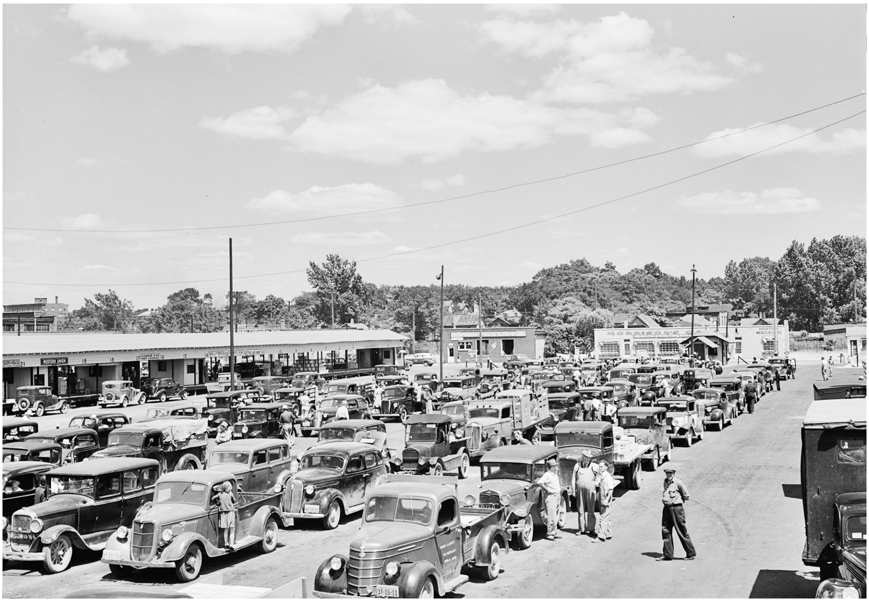


Figure 5.7. *Municipal Fruit Market, Benton Harbor, Michigan, 1940.* John Vachon, photographer. Library of Congress, Prints and Photographs Division, FSA/OWI Collection, LC-USF34-061207-D.

his boss, Roy Stryker, that his pictures would encompass the entire facility and its various functions, including cold storage, the unloading of fruits and vegetables from trains, the loading of produce on trucks headed for retail stores, commission merchants examining produce, and an auction in progress.[94]

The FSA-OWI photographers on assignment in New York City also captured the complexities of wholesale food marketing and distribution in the nation's largest market for fresh produce. Contrasting with Arthur Rothstein's images of clean-cut, white-collar commission merchants at the Washington Market wholesale produce district in Lower Manhattan is Gordon Parks's photographic series of men at work at the Fulton Fish Market. Parks highlighted the gritty atmosphere of the fish market. Abundance, hard work, and pride of place are some of the positive themes in his series. Stevedores pose for the camera, holding up unusually large fish or crustaceans; ship crews take a break after delivering loads of fresh fish just caught off the New England coast; and delivery trucks ready to receive barrels and crates of seafood—packed on ice and headed to the city's thousands of restaurants, food retailing establishments, hotels, and other institutional buyers.[95]

Markets as seen through the lens of the FSA-OWI photographers also stressed the entrepreneurship and community spirit that flourished in areas of the country that still operated traditional wholesale markets. In 1936, the photographer Carl Mydans headed to the French Quarter in New Orleans, where he documented a market established for the Resettlement Administration's rehabilitation clients. Produce dealers stand on the sidewalks outside of their warehouse stores, shifting crates of perishable produce into the shade or onto pallets. Customers in search of bargains pay cash for semiperishable vegetables, such as cabbage and potatoes sold by the crate or fifty-pound bag, while hucksters with no permanent stand hang around the market to catch a buyer for small baskets of berries.[96] Russell Lee followed the Texas truck farmers and retail grocers in the process of loading and unloading vegetables in the early hours of the produce markets in San Antonio and San Angelo. Lee's photos capture the irony of the dog days of summer, when the peak growing season also brought the hottest days for buyers and sellers alike. Dealers are engaged in the backbreaking work of weighing produce with handheld scales. Farmers sell from the back of their trucks or rear car fenders in the darkness of a cool night. Some park beneath makeshift awnings to protect themselves and their produce from the blazing sun during the day. Hucksters without access to tables or stands spread their goods for sale directly on the pavement.[97]

The marketing photos from the New Deal convey the message that despite the lack of modern facilities, vendors still made efforts to overcome difficult conditions in order to minimize food spoilage and waste, to promote honest sales, and to find a quick buyer for their produce. The photographs reached a popular audience in the American Guide Series, published under the auspices of the Federal Writers' Project, which promoted wholesale produce markets as destination points on automobile itineraries and walking tours. Taken altogether, the New Deal artists, photographers, and writers portrayed wholesale markets as labor-intensive but rewarding—as places where one would find bounty and abundance, plentiful food reserves, bargain hunters, creative and low-cost methods for food marketing, and employment opportunities that could temper the ill-effects of the Depression.[98]

Although New York and Philadelphia did not get mega-terminals until after World War II, the New Deal had secured a place for federally funded marketing research that supported the industry, produced some brick-and-mortar projects, and generated major publicity for the social and economic benefits of modern food wholesaling. The New Deal advanced a new scale of food marketing facilities that required regional cooperation, oversight by a public authority, and minimal investment required of any single railroad or other carrier. The postwar industrial park model is the subject of the next chapter, when urban renewal stimulated and in some cases directly financed the USDA paradigm for consolidated wholesale facilities on the urban periphery.

CHAPTER SIX

Industrial Parks and the USDA Paradigm

> Congress hereby declares that a sound, efficient, and privately operated system for distributing and marketing agricultural products is essential to a prosperous agriculture and is indispensable to the maintenance of full employment and to the welfare, prosperity, and health of the Nation.
>
> —Agricultural Research and Marketing Act of 1946

The year 1946 was a turning point in the long, continuing movement to rationalize, consolidate, and relocate food wholesaling in the American city. The Agricultural Research and Marketing Act of 1946, also known as the Hope-Flannagan Act, put federal support for research, study, and experimentation in agricultural marketing on equal ground with support for agricultural production. The legislation encouraged state and municipal agencies, farm organizations, and private industry to cooperate on ways to improve marketing methods and facilities, to reduce distribution costs and price spread between the producer and consumer, to improve dietary and nutritional standards, and to seek new and wider markets for American agricultural products at home and abroad.[1]

Federal support stimulated substantial research and planning projects that cut across state lines, which included wholesale produce markets. Harry C. Trelogan, a USDA bureau chief involved in the creation of the Agricultural Research and Marketing Act of 1946, noted five years after its passage that marketing research had resulted in long-advocated major improvements in produce terminals. In 1951, new facilities opened in San Antonio, Texas, and Columbia, South Carolina, and others were under construction in Hartford, Connecticut, and St. Louis, Missouri. Food processors, particularly in the frozen food sector, stood to gain from new facilities, for their growth depended on not only reliable distributors and retailers but also on technologically advanced and strategically located warehouses and marketing channels. Indicative of the USDA's role in the development of the frozen food trade was the National Wholesale Frozen Food Distributors' presentation of its Distinguished Merit Award to the Production and Marketing Administration in 1951—the first time the trade organization had given the award to a governmental agency. According to Trelogan, the USDA's marketing research was "gaining the confidence of business men to the point that we are getting urgent requests from some firms to conduct research" on their behalf, and he proudly characterized the USDA laboratories as "commercial establishments themselves."[2]

The Agricultural Research and Marketing Act of 1946 introduced open-ended appropriations and authorized the USDA to dig deeper into the problem of price spread, or the gap between what the consumer pays and what the farmer receives. In support of a balanced farming and industrial economy, the USDA promoted the new mantra that substantial profits for farmers and savings for the consumer depended on a wholesale food industry that facilitated the movement of prepackaged or precooked products, fresh produce year-round, and frozen foods from great distances. Thus, the long distance between the farmer and the consumer was celebrated as a technological achievement, recast in a positive light, and embraced by a new kind of market after World War II—the one-stop wholesale food center that handled a complete line of fresh produce and manufactured food products on behalf of the national welfare.[3]

The Agricultural Research and Marketing Act of 1946

The Agricultural Research and Marketing Act of 1946 (RMA) ensured that the modernization of wholesale produce markets would remain on the national urban agenda in peacetime. Large cities were ever more motivated to invest in new facilities owing to tremendous growth in the wholesale sector of the economy since 1939. The 1948 Census of Business reported that sales of wholesale groceries and edible farm products in 1948 showed a gain of approximately 185 percent over sales in 1939. In terms of geographical representation, the wholesale sector (for all commodities) had the greatest gains in the states of New York, Illinois, California, and Pennsylvania, whose combined sales in 1948 accounted for 45.4 percent of the total for the continental United States. Despite this growth, many produce districts were still located in crowded downtown areas where limited space restricted them from expanding with population growth and the increase in per capita food consumption. Most buildings were several stories high, yet the wholesale trade conducted its business solely on the ground floor. Congested sidewalks and streets interfered with the use of the upper stories for other purposes, which left many buildings largely vacant near valuable real estate. Wholesalers, however, were content with their meeting grounds, especially the small independent dealers who paid a flat annual rent payment for storage and the grower who paid only fifty cents a day or $75 a year for a spot to conduct sales from their trucks. The major food chains avoided these congested areas by renting or building their own facilities on railroad sidings—an advantage not available to the independent wholesaler. Consequently, additional wholesale districts grew up in other parts of the city, resulting in a decentralized system of split markets and cross hauling from one district to another. Local planning officials reacted to the dichotomy between the lack of a coordinated food supply system and the promise of continued growth in the wholesale sector by preparing blueprints for new wholesale produce markets that promised sound investments and ideal public works projects in peacetime. The USDA pledged a "hands-off" approach as it developed plans and cost analyses, and proposed organizational structures for a "diversity of would-be-owners" or market sponsors, free of charge. It also coordinated site visits to show off model markets and hosted foreign delegations, including one from Canada.[4]

Between 1947 and 1953, the Production and Marketing Administration (PMA; the successor agency of the War Food Administration) used its authority under the RMA to collaborate with state, county, and municipal agencies interested in proposing new wholesale markets that would attract dealers of local, distant, and imported produce to their localities. The PMA went into action quickly with William C. Crow as director of the Marketing Facilities Branch. Crow had made a name for himself as the world's market expert with his widely disseminated report *Wholesale Markets for Fruits and Vegetables in 40 Cities* (1938), published when he was on staff in the Bureau of Agricultural Economics (BAE). He was an experienced traveler and was well connected to produce dealers, government officials, and railroad representatives involved in matters of agricultural marketing. He collaborated with Wendell T. Calhoun, another USDA agricultural economist then on assignment in Philadelphia, on a major study of wholesale marketing conditions in New York City for Mayor La Guardia in 1940. During the war, Crow served as chief of the Transportation and Warehousing Branch of the USDA's Agricultural Marketing Service (AMS)—a position that put him into direct contact with terminal market officials as he negotiated leases for warehouse space to store supplies for the armed forces. Crow's qualifications made him a natural choice to lead terminal market studies after the war.[5]

Crow made special efforts to promote the RMA to members of the produce trade. It helped that Clarence Kitchen, his close colleague and former assistant chief of the BAE from 1927 to 1939, was now general manager of the United Fresh Fruit and Vegetable Association (UFFVA), headquartered in Washington. Kitchen invited Crow to address the UFFVA at its forty-third annual meeting in New York City in 1947. Invoking Cold War rhetoric, Crow struck fear in an audience weighted with wholesalers and jobbers from the country's largest market for perishable produce. "No nineteenth century method of food handling can survive the atomic age," he told them, referring to the possibility that a bomb attack on New York City could destroy or seriously damage its food supply system. The Manhattan dealers, Crow insisted, were critical to the nation's food distribution system, which could not afford inaction. "Your government, in passing this Act," Crow added, "wants to keep food distribution in the hands of private industry, that it wants you to operate efficiently, and that it wants this so badly that it will furnish the funds and personnel needed to help do the job" of moving the largest possible quantity of foods to the nation's consumers. The RMA would provide them with government assistance to reduce operating costs and increase the quantity of goods they could handle by helping them relocate to modern facilities whose construction costs could be born by public benefit corporations, nonprofit corporations, or the municipality. Crow's rhetoric and call for expanding food infrastructure for the sake of national security reflected the larger atmosphere of near-permanent war that permeated other kinds of public works projects during the Cold War.[6]

Crow delivered the same message at the Businessmen's Conference on Urban Problems, sponsored by the United States Chamber of Commerce and held in Detroit. He announced that at least twenty-five cities were trying to correct their marketing conditions by planning new wholesale food facilities on inexpensive land where rail connections could bring cars directly to the buildings. Stores would have front and rear entrances, with one-hundred-foot-wide streets in between, for trucks to park perpendicular to loading docks or to park while idle. "This kind of business is a one-floor, or at most a two-floor, operation; thus, if handling costs are to be held down, a great deal of land is required, just as it is for handling lumber, coal, and other bulky products. A location in the downtown business section is not necessary."[7]

While Crow went on the road to promote the RMA, marketing specialists in his department used the same research techniques that the BAE had been using since the 1920s. Federal agents worked on location with special interest groups, gathered unload statistics, assessed current marketing channels, observed existing physical facilities, and evaluated possible sites for new markets. They concluded their projects with well-illustrated reports—mass-produced for wide circulation, usually mimeographed, and free of charge. The formulaic reports began with a brief historical sketch of the origins of the city's markets, went on to describe the inefficiencies in current systems and physical facilities, and concluded with recommendations for the kinds of structures, layout, location, and ownership for new market terminals.

USDA marketing specialists also reinforced their recommendations with scale models for display at public demonstrations. Catherine A. Perry, the principal model maker on staff, built them complete with miniature trucks, railroad cars, fences, and trees according to their plans, and made the market appear as it would at the peak of a busy day (fig. 6.1). When staff from the Marketing Facilities Branch of the PMA proposed a new market to a city or community, "a specially tailored model goes along in two or three suitcases and is set up for all to see." The scale model was an important pedagogical tool that demonstrated "how marketing can be made easier, quicker, and less costly by such modern features as wide market streets, front and rear unloading platforms at the wholesale stores, plenty of parking spaces, and rail

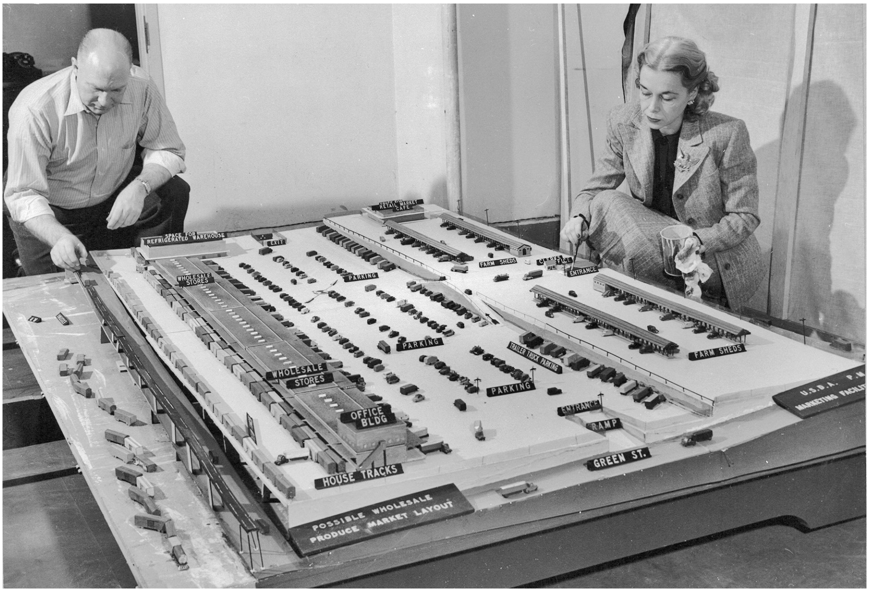

SPACE FOR REFRIGERATED WAREHOUSE
WHOLESALE STORES
PARKING
FARM SHEDS
ENTRANCE
PARKING
TRAILER TRUCK PARKING
FARM SHEDS
WHOLESALE STORES
PARKING
OFFICE BLDG
ENTRANCE
RAMP
GREEN ST.
HOUSE TRACKS
POSSIBLE WHOLESALE PRODUCE MARKET LAYOUT
U.S.D.A. P.M.A. MARKETING FACILI

Figure 6.1. *Catherine A. Perry, USDA Model Maker, Builds Miniature Model of a Possible Wholesale Produce Market for the Marketing and Facilities Research Branch of the PMA, 1948*. National Archives, RG16-G, Box 236.

connections at the stores." Its parts were moveable in such a way that observers could consider alternative layouts for buildings.[8]

Once in action, the RMA stimulated federal dollars for research and final reports for a broad range of cities. Philadelphia and St. Louis were major centers of consumption that declared their historic wholesale districts to be redundant, obsolete, or lacking room for expansion. Buildings were outdated, rail connections were poor, and the wholesale markets were no longer located at a distance convenient for the dispersed retail trade. Mid-sized cities (fewer than 500,000 in population), such as Hartford and Bridgeport in Connecticut, or the southern cities of Richmond, Norfolk, Atlanta, Savannah, Miami, Tampa, and Baton Rouge, had similar problems but on a lesser scale, owing to their size relative to greater metropolitan areas nearby.[9] Cities with a population fewer than 100,000 in 1950 also showed promise as sites for new markets where produce coming into a state could be diverted to relieve pressure on its more congested cities. Some of the promising cities were Asheville and Winston-Salem, North Carolina; Greenville, South Carolina; Beckley and Huntington, West Virginia; Waco, Texas; and Tulsa, Oklahoma. Although they were not major centers of consumption, they did serve or had the potential to serve as shipping points for redistribution of fresh produce to larger markets in their states, and they offered a clean slate for market sponsors involved in the planning process.[10]

The USDA conducted marketing studies at the invitation of state and local planning groups, as it did for the Connecticut Regional Market Authority for the study of New Haven, and it cosponsored with state departments of agriculture, schools of agriculture, and extension services, as in the case of Columbus, Ohio; Savannah; Richmond; Baton Rouge; and Asheville. Large cities with active chambers of commerce also participated in studies of their localities, as did San Diego, and city planning commissions took advantage of getting federal support to study ways that new wholesale markets could be integrated into their master plans, as in the case of San Antonio and Cincinnati.[11] Sherwood L. Reeder, director of master planning in Cincinnati, was elated at the interest that the Cincinnati report received abroad. Likewise, the librarian of the Department of Regional Planning at Harvard University noted that the Cincinnati report received "very intensive use" by library patrons and was on the required reading list in two different graduate courses at Harvard. Students and practitioners of agriculture, marketing, and city planning in the United States and abroad used the USDA reports on city wholesale markets, as did members of congressional hearings in the coming decades.[12]

Just a Big Moving Job

Wendell T. Calhoun had been one of the more active USDA specialists leading wholesale market studies in large cities before the war, and the RMA stimulated a demand for his services in small and mid-sized cities. Calhoun was eager to take on the task, for he believed that the USDA "stood little chance of getting improved markets in the big cities until we can get at least one good working model as a demonstration of what such a market will do." The biggest obstacle was the dealers, especially those in New York who were adamantly opposed to leaving their historic location on Washington Street in Lower Manhattan, even for new quarters. Calhoun confided to Clarence Kitchen, his former USDA colleague now at the UFFVA, that "as you so well know, dealers in most markets have little conception either of what a good market is like, or how it would affect their operations, because they have never seen one. That was the most discouraging part about the work in New York—seldom could I get even a glimmer of comprehension about any facilities different from what they now have there." Calhoun also shared his frustration with New York's failure to produce a model market for the country in a letter to the Citrus Committee of the American Farm Bureau Federation in Anaheim, California. "By a 'real produce market' I mean the physical facilities designed, arranged, and located for the specific needs of this highly specialized industry . . . . Most of the dealers [in New York City] have never seen a good market. They think of facilities for handling produce only in terms of what they are accustomed to and have used." Calhoun continued to criticize the New York dealers for their lack of knowledge and imagination: "Thus in New York they assume that they must always be tied to the piers, just because all receipts at New York have been unloaded on piers ever since they can remember. They have no conception of what an 'all land' market could be like. In no other city in the country would the produce men consider having a market completely inaccessible to motor trucks on three sides, yet that is what the New York dealer takes for granted."[13] Calhoun was determined to apply his "all land" market concept to landlocked cities that had no choice but to depend on truck and rail receipts.

Calhoun's recommendation for a wholesale produce market in San Antonio required a liberal acquisition of low-cost land to meet future needs, combined with a conservative building program that provided just the number of stores and platforms currently used by the downtown dealers. He assured planners that market developers could sell off unused land later and for a profit because of the enhanced value of the land in proximity to the market. Visually, his San Antonio plan anticipated the aerial photography used by real estate agents and developers for other large, land-intensive projects such as shopping malls, but he insisted that the idea was to "keep it simple"—stores did not have to be large, and buildings did not have to be elaborate, because "it's just a big moving job."[14]

The lure of expertise provided and paid for by the federal government took Calhoun all over the map. Responding favorably to his earlier studies in Huntington, West Virginia; St. Louis; and San Francisco,[15] the cities of Dallas, Oakland, and Honolulu called on his services, as did Memphis, Tennessee, and Jackson, Mississippi. In his correspondence with state and local officials, colleagues at the USDA headquarters, and members of the trade, Calhoun provided extensive details on the physical layout of model markets, and he was confident in naming the cities whose markets worked or did not work. He stressed the necessity of adequate tailboard loading space with front and rear platforms that run the entire length of contiguous stores. The best working model was the Pennsylvania Railroad Terminal in Philadelphia, which he had observed in operation for six years, "when it was really *the* market in that city." Calhoun communicated from the field to J. Stanford Larson at the USDA: "Evidently I did not get my point across regarding length of unbroken blocks of stores." The desirable length of blocks would have to be a compromise between two factors: (1) the traffic flow through the center driveway and the convenience of movement between front and rear driveways and (2) the desirability of giving buyers uninterrupted access to the greatest number of stores. "The latter is highly important. Experience in Chicago, Kansas City, Kansas, and Denver has proven that buyers will not readily go across a street between blocks of stores. As I mentioned in my previous letter, a cross street at the Denargo Market in Denver had to be closed by a continuation of the front platform before the stores in the second block could attract their quota of buyers." Soon after the Kansas City, Kansas, market had opened, "the dealers . . . pressed the opinion that the stores should have been continuous without a cross street." In reference to Chicago, Calhoun opined: "I am sure South Water Market dealers would veto any suggestion of a cross street through their block which contains 70 store units." Convinced of his expertise in matters of layout and design, he fully agreed that the USDA was not in a position to state dogmatically just how long these blocks should be, but he did have proof that breaks in the rows of stores should be held to an absolute minimum.[16]

Calhoun counseled Professor D. Gray Miley, of the Agricultural Experiment Station at Mississippi State College, on a prospective market in Jackson, Mississippi. Calhoun suggested the adoption of certain features of the Northern Ohio Food Terminal in Cleveland and the South Water Market in Chicago, and his strongest recommendation for a model in terms of physical facilities was the one in Kansas City, Kansas. Unfortunately, as Calhoun explained, the Kansas facility was a failure as a produce market, owing to the fight between the railroads. For a model "smaller market, . . . the best we have to offer is Denver." Calhoun had visited Denver's Denargo Market three times in the past fifteen months with representatives from San Antonio, Dallas, and San Francisco for a detailed study of construction and handling operations. "It's rather small but may be a model not only for the large Eastern Seaboard cities but for smaller ones, like Cincinnati and St. Louis." The Denver market had the potential, according to Calhoun, to "whet their appetite, so to speak, for a good market in their own cities. Then with a good market in one of these places we will really be in a position to demonstrate what might be done in New York, Philadelphia, Baltimore, etc." Calhoun was alluding to the big break that he and other marketing experts in the USDA hoped to witness in their careers, namely, the modernization of wholesale food distribution centers in New York, Philadelphia, and Baltimore, where the old-time produce districts were still operating in crowded, cobblestoned streets.[17]

Coordinating the Carriers

Modes of transportation dictated the location, layout, and design of new markets, and for this reason the produce industry deferred to the USDA for its comprehensive and impartial market research. After all, the railroads tallied only their own unloads, the trucking companies were not organized enough to perform statistical services, and the airlines were not interested in taking on this kind of work. Thus, the most comprehensive and authoritative statistics on the quantity and type of perishable products and their mode of arrival to city markets were gathered and disseminated by the USDA. In turn, the USDA tailored terminal proposals to geographic location, existing infrastructure, and the potential for water, rail, and highway transportation. Port cities, for example, were candidates for refrigerated warehouses and upgraded wharves to accommodate shipping lines, as in the case of San Juan, whose study the USDA prepared in cooperation with the agriculture and commerce department of the government of Puerto Rico.[18]

Air transport of agricultural perishables was still in its infancy, which resulted in USDA reports that were either visionary or vague on the subject. A 1943 study for a new food terminal to replace New York's Washington Street Market suggested that produce could arrive by rotor aircraft on the huge flat roof of the receiving platform designed to double as a landing field. A 1946 focus group, however, was more realistic and revealed the challenges that lay ahead for airfreight. Namely, growers would have to learn how to pick, handle, and package produce properly for air shipment, pilots would need special training on perishable freight, and ground facilities at airports would need improvements. The BAE tested the effects of air transit on the retention of freshness in fruits and vegetables and calculated the cost savings in air travel versus rail, which required stops at icing stations en route. The BAE also tested the comparative cost per ton-mile for transporting certain perishables in certain kinds of aircraft, such as the transport of strawberries and tomatoes from Florida to Detroit in a C-47, and lettuce from California to Detroit in a C-54A. The agency's exploration into the nascent field of air transport for perishables also extended to its identification of certain cities that might take a lead, such as Kansas City—the hub for Trans World Airlines, an important distribution center, and a city that might profit from a planned system of air freight from all parts of the globe.[19]

When gas rationing ended after the war, the truck gained dominance over the train in long-distance hauls of perishable produce. The flexibility of the truck—its geographical reach, customized hauling capabilities, and ability to haul small loads on short notice—was an essential component in the postwar mass-consumption economy.[20] Wholesale dealers in Chicago were getting new sources of supply for their produce from truckers bringing produce from great distances and not just from local hauls. Another important development was the cash market for truck produce located at the source of production. In 1946, for example, the growers' market at Benton Harbor, Michigan, was one of the largest in the world. The city-owned wholesale market, built in 1930, generated $9 million in sales of fruit and produce (primarily peaches, apples, tomatoes, and grapes); it handled 7,493 carlot equivalents of produce; and it sent truck hauls to twenty-nine states.[21] Another model growers' market for truckers was the state-owned facility in Plant City, twenty-four miles east of Tampa. Four hundred growers arrived on a typical market day—in "pickups, ancient sedans, small trailers and coupes" filled with crates of strawberries and other local produce. Traffic men directed deliveries into the eleven marked lanes leading through a long selling shed, ninety feet wide by six hundred feet long, where goods sold at auction. Independent truckers under hire by city wholesale dealers were on hand to load their vehicles with purchases headed for long-distance markets. One driver who worked for a Maryland wholesaler made hauls from Plant City in a refrigerated truck built of plywood and spun glass insulation. At the front end of the body was an ice bunker and motor-driven fan to cool the interior. After sales ended in the afternoon, he and his alternate would head north from Plant City, driving six-hour shifts through the night and all next day and stopping for light meals and snacks at truckers' service stations. They could reach St. Louis in twenty-six hours, Chicago in thirty-four, and New York in thirty-eight. He described the yearly cycle of crops that ripened in succession farther north as spring advanced, noting: "Wherever the crops ripen, there the trucks appear."[22]

The success of truck transport was due in part to a streamlining of produce containers during World War II. In order to save on material and labor, the war effort not only forced a reduction in the variety of sizes for cans and glass jars used by food manufacturers but also for market baskets, hampers, and barrels used by growers and shippers. By 1946, growers and handlers could use three types of official berry boxes (down from forty-four), six types of market baskets (down from forty), and nine types of hampers (down from seventy-five). Container standardization and a reduction in the variety of types simplified the task of packers on the farm and in packing sheds, as well as the process of loading and unloading trucks, warehouses, and stores at city markets. The long-haul truck transport and handling of perishable produce also benefited from industry improvements in commercial packaging. DuPont saw a market for cellophane (the commercial name for cellulose film) in covered packages not just for the retail grocer but also for the shipper of fresh produce. Cellophane was a well-suited packaging medium for fresh fruits and vegetables, owing to its transparency throughout the course of their trip and for the product's resistance to germs, oil, dust, and moisture. DuPont marketed cellophane for a variety of uses in the wholesale trade—applying it as wraps for heads of lettuce, case covers for apples, a combination wrap of tissue and cellophane for citrus fruits, bags for carrots, and "hoods" over boxes of blueberries and strawberries. DuPont also manufactured self-sticking labels for bananas and melons. As shippers of fresh produce faced competition from distributors of frozen and canned foods, lightweight, branded containers, wraps, and labels protected produce in transit, reduced shipping expenses, and aided city wholesale dealers in stacking, display, and marketing. Whereas staples such as potatoes, turnips, onions, and cabbage dominated the grocery counter "in grandmother's day," the postwar consumer encountered a more enticing spectacle at the store. Head lettuce, celery, tomatoes, green beans, and green peppers joined bunches of broccoli and stacks of spinach in transparent bags at the grocery counter, and entire windows full of oranges, lemons, and grapefruit were commonplace commodities available all year long.[23]

The new wholesale produce market promoted by the USDA after the war emphasized the benefits of catering to long-distance trucks hauling fresh, packaged, and frozen produce to the market, where goods could be unloaded and then stored, sold on the spot, or redistributed with the greatest efficiency. The logical starting point for achieving the benefits of a modern terminal was to abandon the old produce district and start fresh in a new location, but most dealers still viewed change with suspicion. George V. Branch, market manager of the Detroit Union Produce Terminal, offered his advice on the one way to get dealers to move as a body, namely, "some lucky crisis like the condemning of the old South Water Street produce district . . . for Wacker Drive."[24] Branch also reported from experience that after dealers made the move, they did not at all miss their former arrangements. "Thirty years ago our terminal [in Detroit] was located close to town. It had to be there, within horse-and-wagon range, and the jam was terrific. Those days, we used to work 70 to 80 hours a week, getting the stuff out. Today we're out here, near the edge of Detroit, where there's plenty of space. We handle several times the volume, and we do it in a forty-hour week. We live like human beings."[25] The voice of experience was important to the USDA, as it promoted quality of life on the job as an important consideration in the design and promotion of new wholesale produce markets after the war. Wendell Calhoun, for example, emphasized in his San Antonio report that "if a long-distance truck driver knew that he could sleep, bathe, and shave in a clean, comfortable room near the market while his load was safe from pilferage, this would be a big inducement to do his business on this market."[26]

An illustrated reader for schoolchildren encapsulated the importance of transportation in providing fresh food to "city people." In 1951, Scribner published a short story for young readers titled *Bill's Story of the Wholesale Produce Market*, by Marie Elizabeth Smith, head of curriculum for primary education in Los Angeles. Smith offered a boiled down, ahistorical, frozen-in-time 1950s version of how food moved from the farm to the dinner table, when the "middleman" moved produce from the big farm by way of the big trailer, cargo plane, or ocean vessel, to the "big market," and from there to the grocery store. Each page illustrates a step in the process of moving produce from the industrial countryside to the big-city wholesale market, while keeping the fruits and vegetables "crisp," "cool," and "fresh" along the way. In order to accomplish this, "the wholesale market needs trucks. The wholesale market needs trains. The wholesale market needs airplanes." Even early childhood was not too soon to educate the consumer on the benefits of a coordinated food marketing and distribution system in which the wholesale market played an essential role.[27]

Public Housing for Agriculture

The postwar price tag for new wholesale markets ranged from $1 or $2 million for Atlanta, Houston, and Hartford, Connecticut, to a staggering $14 million for Boston, where a proposed highway threatened the massive produce district around Faneuil Hall. Who would finance their construction? That was "the elephant in the room," the obvious question left open for debate at hearings on H.R. 8320, a bill introduced by Harold D. Cooley, the congressman from North Carolina and long-standing chair of the House agriculture committee. Cooley's bill called for $50 million of direct loans to cities that would modernize or relocate their wholesale markets, in addition to an insurance fund to guarantee up to $100 million in mortgages. William Crow, or "Billy Crow," as he was called by his friends at the hearings, testified on behalf of the USDA in support of the proposed legislation. According to Crow, there had been no significant change in the buildings and locations of wholesale markets since the Federal Trade Commission recommendations of 1919. Most city markets were constructed "before the railroads were invented," rendering them inefficient for modern marketing methods. "Nobody is happy about this," he added, and "all groups have been complaining for years" for a host of reasons. Farmers did not get a fair price because produce arrived in poor condition. Wholesalers were at a disadvantage because the large chain stores and food distributors left the produce districts to build their own warehouses near the railroad yards. City government was not pleased to have marketing and its associated traffic located in the heart of the business district. Retail grocers did not want to make wholesale purchases based on seeing samples, nor did they want to deal with downtown traffic. The railroads were losing business to the truck, and the consumer was getting an inferior or overpriced product. The Marketing and Facilities Branch had furnished plans and advice to more than thirty localities; it was involved in the planning and construction of twelve new wholesale markets; and it had a backlog of thirty projects that were on hold for lack of enough trained USDA personnel to meet demand.[28]

Crow evoked the Washington Street Market in New York City as the epitome of inefficiency and a case for federal support for a modern replacement facility (fig. 6.2). It was still the world's largest market for perishables, where 200,000 carloads of fruits and vegetables alone (not including eggs, meat, poultry, butter, and cheese) moved into the city each year. Putting this in perspective, "that amounts to about one carload for every daylight minute of the year," or 8 to 10 percent of all fruits and vegetables produced in the United States. The New York City market received produce from forty-four states in the Union—one-fifth from California and another fifth from Florida. Rail receipts reached the end of the line on the New Jersey side of the Hudson River, where cars transferred onto special floats that crossed the river to piers

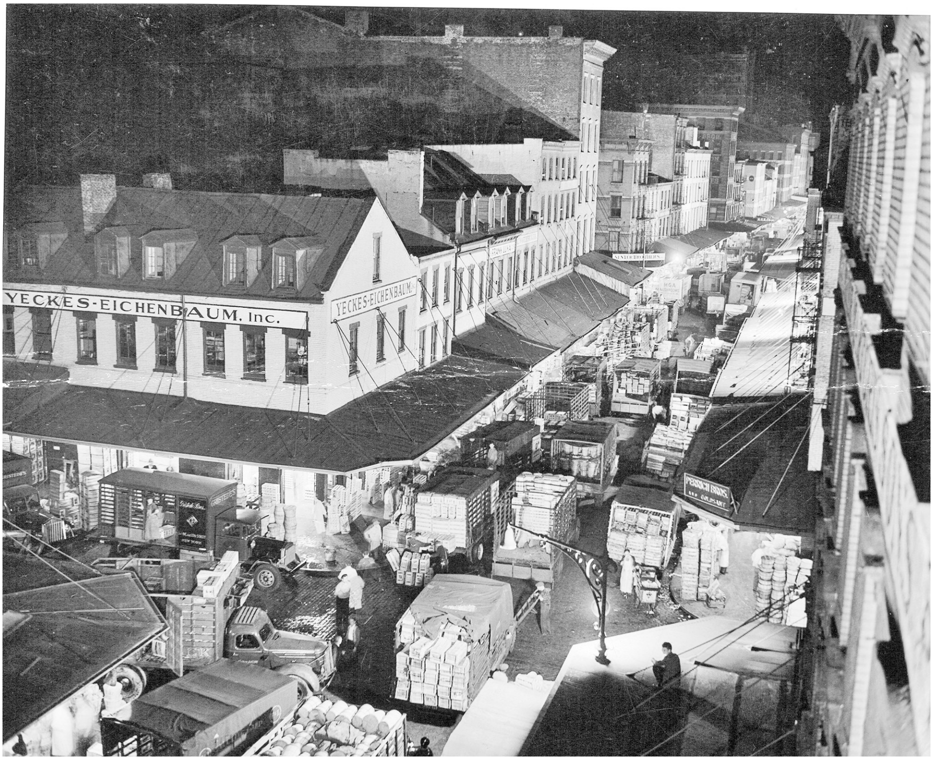


Figure 6.2. *Washington Street Market, New York City, 1942.* Copyright 1942 by Time, Inc. National Archives, RG83-G, Box 10.

on the New York City side. The Pennsylvania, Erie, New York Central, and B&O Railroads paid for the cost of unloading at their respective piers. Then, dealers sold directly from the piers or trucked the produce to their wholesale stores at the nearby Washington Street Market district, where on a peak day Crow and his team counted 1,350 trucks coming and going "literally in the shadow of the skyscrapers of lower Manhattan." At the market's edge stood the World Telegram Building and some of the city's most expensive real estate. When asked if the market could be modernized for direct rail receipts at its present location, Crow told the agriculture committee that it would cost millions of dollars to demolish enough buildings and to get sufficient land to lay tracks into the area. The shape of the market and its current layout, he added, made it impossible to get tracks behind the stores, and the buildings lacked loading docks anyway. In short, "it would be cheaper to start over."[29]

Dock Street Market in Philadelphia was still on Crow's radar screen for replacement, and supporters from the market joined Crow in testifying at the hearings. Israel Rothstein had been in the wholesale produce business since 1914, trucking stock from the rail yards to his store on Dock Street. He welcomed a new truck terminal at Oregon and Delaware Avenues in South Philadelphia and promised to move his business there. The Philadelphia merchants had considered a new terminal since 1935, but financing and the threat of war postponed the project. Even though the Reconstruction Finance Corporation had approved their plans, it lost its authority to guarantee construction loans for banks after the war. Emerson C. Custis, the real estate investor promoting the plan, was unable to secure a loan, so the project remained on hold. Rothstein and his fellow supporters now hoped to get some of the federal aid that was currently "diverted" to housing.[30]

Opposition to a federal loan program for new wholesale markets, however, kept the Cooley bill from going any further. William S. Hill, the representative from Colorado, worried that the secretary of agriculture would have "dictatorial powers with this bill." M. Oldham Lewis, secretary of the Wholesale Perishable Market Improvement League of Baltimore, went further to state that a program of USDA-approved and planned wholesale produce markets was "socialistic"—a form of planned economy such as the one "that had reduced England to its present deplorable socialized state." Lewis argued that it would eventually eliminate venture capital. Clifford R. Hope, the representative from Kansas, was uncertain about where to "draw the line and where we have to stop before we will have the Federal Government financing everything." Hill of Colorado piped in again about "a little town at the foot of the Rocky Mountains by the name of Denver . . . , which had courage enough and brains enough to develop their own market without coming here [to Washington] crying like babies and asking the Federal Government to supply it." Louis D. Goldstein, a fruit and vegetable dealer, was satisfied with his carlot business at the Pennsylvania Produce Terminal in Philadelphia, where he dismissed any problem with traffic jams. "This is not a farm bill," added Goldstein, and "I think the truck interests would like to have Uncle Sam building something for them." John C. Leonard, a jobber and property owner in Philadelphia, also opposed the bill, stating that if new market terminals did "not pan out, the [agriculture] Secretary is going to have something on his hands, just like these Lustron homes," referring to similar concerns that there might be a surplus of postwar prefabricated houses for veterans and their families.[31]

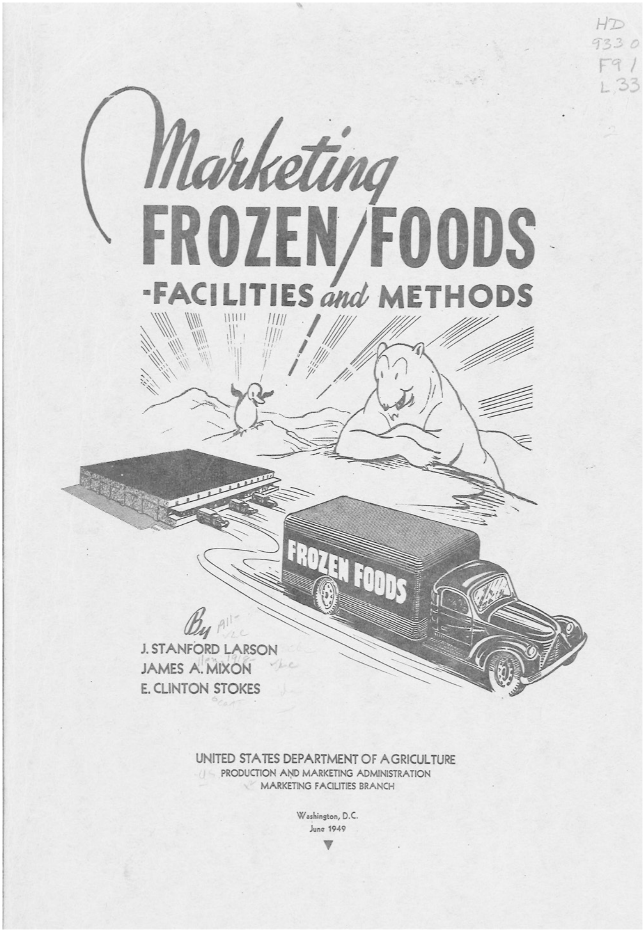
Five years later, in 1955, Committee Chairman Cooley still pressed on—this time with H.R. 4054, a more restrained bill to provide federally subsidized mortgage insurance (instead of direct loans) for new marketing facilities. The agriculture secretary would have authority over a $25 million revolving fund, and the amount of insurance would not exceed 85 percent of the total cost of the facility. The plan was a safe investment, and one that would pay for itself. Federal assistance would be available only to the most promising market projects that had backing from local financial institutions and guaranteed tenants with pre-signed leases. Cooley argued that it was time "to furnish the leadership and incentives, just like the FHA did with housing," and private capital would follow.[32] Evoking the mortgage insurance program of the Federal Housing Administration, Cooley pronounced that with H.R. 4054: "Here is some public housing in which farmers and city folks will all benefit. They will participate in it. It will profit everybody except the racketeers, and the parasites who have been preying on our distribution system. . . . We could at least start to do a little public housing in the field of agricultural, perishable commodities."[33] Following William Crow's testimony on the deplorable state of wholesale markets in large cities, W. R. Poage, of Texas, backed the bill on the simple grounds that "we can't keep doing nothing."[34] Adding fuel to the fire were popular exposés of conditions in large city markets that put dealers in an unfavorable light for hanging on to their markets despite the recommendations of the USDA and the findings of the House Committee on Agriculture chaired by Cooley.[35]

Despite an apparent sense of urgency, Gregory S. Prince, general solicitor of the Association of American Railroads, called the proposed federal intervention "a blow to the free-enterprise system." The railroads had invested heavily in marketing facilities. Any new ones built solely at the discretion of the secretary of agriculture would be "monopolistic" and would introduce federal control into a new area of business that was heretofore local. Chairman Cooley snapped back at the railroad representative, saying, "You never did anything to improve the markets in New York, Boston, and Philadelphia," to which Prince replied that "the railroads are not in the business as a utility to serve communities by providing marketing facilities." "We are a transportation agency," he added, and "we do not have an obligation to provide the necessary, total market facilities for a community."[36]

A leave well enough alone position was also taken by Kenneth L. Scott, director of the Agricultural Credit Service, who preferred to withhold insured loans until more effort was made to attract private capital. In a bold rebuttal, Cooley stated: "The Secretary of Agriculture said that private capital should do this, but private capital has not done it for 100 years, and I do not believe that private capital is ever going to do it."[37]

In dismissing the secretary of agriculture's faith in the private sector, Cooley was referring to Ezra Taft Benson, the Republican secretary appointed by Dwight Eisenhower in 1953 to appease conservatives who had demanded an anti–New Dealer for the post. Benson immediately set about the task of dismantling New Deal farm policy, which included limiting government involvement in agricultural marketing. Benson already had a taste of Washington politics when he was executive secretary of the National Council of Farm Cooperatives from 1939 to 1944. The lobby group represented some of the most powerful agricultural marketing associations, such as the California Fruit Growers Exchange (producers of Sunkist brand products), the California Associated Raisin Company (Sun-Maid), and the giant Land O'Lakes dairy cooperative. Benson left Washington in 1944 to become a member of the ruling body of the Church of Latter-Day Saints and returned to Washington for his executive post at the USDA in 1953. Benson envisioned a countryside populated by large-scale industrial farmers and non-unionized transportation and food industry workers, and he immediately downgraded the BAE from a division to a branch in order to weaken its hand over the food industry. The economic research assignments formerly under the BAE transferred to the Agricultural Research Service and the AMS. The fragmentation of the BAE had agricultural economists upset that the new emphasis on "service" would make their economic and statistical work suffer by channeling them away from research and into action programs that needed to show quick results. The building of economic strength into the BAE was a task of years, they argued, and they were not certain who would maintain basic scientific research in the years to come. Furthermore, agricultural economics was now an established science and profession, with departments in every agricultural college in the country and a thirty-year-old professional organization with several thousand members. The BAE had been an important training ground for new recruits, and Benson's reorganization had a demoralizing effect that hindered the agency's ability to attract and keep new talent. Its "dismemberment" came at the peak of the BAE's highly acclaimed status around the world.[38]

In this environment, the Cooley bill went nowhere, and Congress officially canceled the RMA in 1955 due to unclear results. RMA-funded projects that began in the early 1950s, however, continued into the late 1950s and 1960s, which still gave room for some USDA economists and engineers to maintain their relationship with local government and industry on design and construction.[39] Crow remained on the scene as the leading figure guiding this effort. Federal assistance for construction loans notwithstanding, he pressed on with his notion of the optimal location for a wholesale market in a large city—a position he had articulated at the Cooley bill hearings in 1955. In Crow's words, "I do not think it is necessary for these wholesale markets to be located in the downtown business section of the city. They can be some miles away from there, but it would not be prudent for them to be miles away from the railroads. They would need direct rail connections in order to operate economically, as well as the streets and highways from the point of their location to every part of the metropolitan area."[40] Crow reiterated this message, beyond the walls of Congress, to city planners, market developers, and trade organizations. Cities needed new facilities, he insisted, because existing ones could not handle the current volume of produce; the trade has left the old markets that stood in the way of street, highway, and other redevelopment projects; and modifications in the physical plant were necessary to accommodate new hauling techniques for frozen and prepackaged foods. Backing Crow's position were decades of USDA reports on commodities in cold storage warehouses as well as the reports of his colleague J. Stanford Anderson, whose publications on marketing facilities focused on the growing trade in frozen and packaged foods (fig. 6.3). New housing for the produce trade was necessary, Crow warned, if many of the firms involved were to make profits or even remain in business.[41]



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Marketing
FROZEN FOODS
-FACILITIES and METHODS

By
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JAMES A. MIXON
E. CLINTON STOKES

UNITED STATES DEPARTMENT OF AGRICULTURE
PRODUCTION AND MARKETING ADMINISTRATION
MARKETING FACILITIES BRANCH

Washington, D.C.
June 1949

Figure 6.3. Cover of *Marketing Frozen Foods: Facilities and Methods* by Stanford Larson, James A. Mixon, and E. Clinton Stokes. Washington, DC: USDA, PMA, 1949.

Constructed "Without Cost to the Taxpayers"

Federal assistance did come indirectly during the years bridged by the American Housing Act of 1949 and the Highway Act of 1956—the two most influential pieces of legislation that shaped the growth of American cities in the postwar era. Under the banner of slum clearance, the old produce districts were perfect targets for cities anxious to tap federal dollars for urban renewal projects under Title I of the American Housing Act. Likewise, the Highway Act stimulated precisely the kind of suburban infrastructure that could support the USDA model for new wholesale produce markets. By passing on to the federal government the high cost of demolishing an old market district and building the necessary highways and cloverleaf interchanges, interested cities could better lure sponsors of new wholesale markets with project budgets that avoided the exorbitant costs of demolition, site clearance, and access. The lower price tag had the effect of appealing to lending institutions, and it stimulated private-sector redevelopment and interest.

On November 5, 1954, the *Houston Post* announced the public opening of the "newest[,] largest[,] most modern produce terminal in the South," which was "constructed without cost to the taxpayers." A special newspaper section devoted to the Houston Produce Terminal promoted the city's "contribution to an eight billion dollar industry" and a "model of a model produce terminal." The thirty-seven-acre complex located off Wayside Drive near Delafield Street in southeast Houston launched "a new era in food handling," and dozens of article headlines unveiled its long history and spoke for themselves: "Mart Took Many Years of Planning," "No Nostalgia When Packers Abandon 'Row,'" "Old Market Setup Was Haphazard," "Progress Due to Leadership," "Grocers Endorse Produce Terminal," "Most Units in New Produce Terminal Already Leased: 28 Unassigned," "Produce Kept Fresh by Direct Rail Deliveries," and "Truck Farming Industry to Thrive with New Terminal."[42]

The *Post* celebrated the demolition of the hodgepodge of produce houses along congestion-choked Old Produce Row on Commerce Avenue, "where squadrons of flies circled and dived along the street." The old market had been a place of idleness and vice, where one encountered "broad-backed workmen in aprons leaning on lift trucks" and others who "kneeled on the sidewalk in a tomato box alcove and shot dice." Also commonplace were "odors of overripe tomatoes, potatoes and bananas mingled with the smell of soggy excelsior." With the market gone, the city could begin its "overall attack on blight" and revamp the area "with parking lots, parking buildings and new skyscrapers." Critics of the old produce district in Houston, as well as critics of markets in other cities, cited demolition as the first step in progress—an attitude that was pervasive in the postwar era.[43]

A new terminal, in contrast, would promise the maximum in sanitation, refrigeration, state-of-the-art forklifts, and conveyor belts for proper handling of produce. Developer and contractor J. F. Curlee secured backing from the Santa Fe and the Fort Worth and Denver railway companies for the $3.5 million complex, which included four rows of stores with loading docks at the rear, railroad sidings, a farmers' market, and buildings for administration, broker offices, meeting rooms, and a cafeteria, barber shop, bank, haberdashery, and flower shop. The central thoroughfare was a nineteen-acre concrete slab “large enough to move an army through” and likened to a wide airplane runway.

Photographs in the special section of the *Post* featured store interiors, including images of men inspecting boxes of apples as they placed them on a laborsaving conveyor belt that carried the fruit directly into a refrigerated room. Two young women inspect tomatoes, place them in boxes, and cover them in cellophane wrapping for shipment to area grocery stores. Illustrations of maps, aerial photography, and a scale model of the market also suggest ways to access and navigate within the terminal complex. Farmers could approach it from the east on Old Spanish Trail toward the Galveston-Houston Freeway, or from the west by way of the Freeway on Old Spanish Trail. A new cloverleaf intersection just east of the Houston Belt and Terminal Railway overpass made the farmer’s trip a one-stop affair, where he could unload all of his produce with speed and convenience.

Promoters argued that the terminal’s modern and spacious facilities encouraged farmers in Harris County and adjacent areas to increase their truck farm acreage and predicted that Houston and its environs would become one of the largest vegetable-growing sections in the state. Other advantages would accrue from the market’s single governance by the Houston Produce Terminal, whose board consisted of local produce dealers committed to its financial success. William Crow of the USDA attended the opening ceremonies and was pleased to see the fruition of his agency’s preliminary recommendations for Houston—another one of the many city market studies funded by the RMA.[44]

With Houston’s new terminal up and running, other cities began to flex their muscles, and the American Society of Planning Officials (ASPO) was pleased to report that wholesale produce markets were finally making their exodus from central business districts. New markets were in various states of completion, based on plans and advice from the USDA’s AMS. Crow reported to the ASPO on just some of the cities that recently built a new wholesale market, had one under construction, or had one in the planning stages, such as Boston, Hartford, Rochester, Buffalo, Cleveland, Indianapolis, Louisville, Nashville, Columbia, Greenville, Atlanta, Augusta, Savannah, Jacksonville, Miami, St. Louis, Kansas City, Denver, Dallas, San Antonio, and San Juan. The ASPO considered the new terminals in Houston and Indianapolis to be most representative of new market developments.[45]

The ASPO cited land use as an important factor in shaping the future of food systems in large cities, as local planning commissions embraced the argument that old produce districts were located on or near choice property while they returned very little to the city in taxes. Citing San Francisco as an extreme example, the ASPO reported that the assessed value in the produce market was $4 per square foot for land and buildings versus $40 per square foot for prime business property just a few blocks away. Worse yet was the blighting effect of the produce market upon adjacent areas, where “sickness and disease, pilferage and petty crimes are commonplace.” According to the ASPO, these problems elevated prices and lowered the quality of produce for the consumer, and the only solution was to rebuild the market elsewhere and replace it with a future “Rockefeller Center”–type development.[46]

In 1954, the San Francisco Department of City Planning proposed removing the produce district to make way for redevelopment. The area, outlined on a planning map titled “Wholesale Produce Market Proposed Redevelopment Area,” stretched northward from the Ferry Building, near the central business district, and included a collection of warehouses and small wholesale businesses with rolling-door storefronts. Newspaper articles and official planning documents cited the produce district as a fire hazard, in addition to describing its dilapidated low-rise buildings as unhealthy and inefficient. With no public support for keeping the produce district intact, bitter battles ensued as business owners fought to get a fair value for their old quarters, and dealers brokered guarantees that firms would move as a whole. Powerless against the San Francisco Redevelopment Authority, which cleared the land in 1961, the wholesale trade relocated to several new food terminals on the southern waterfront—the San Francisco Wholesale Produce Market on Jerrold Avenue in Bayview and the Golden Gate Produce Terminal farther south (fig. 6.4).[47]

Urban renewal funds empowered city planners to make use of market sites for other purposes, and Philadelphia’s historic Dock Street Market was next in line to give way to redevelopment.[48] Pressure to move the market to a site near the railroad terminals in South Philadelphia had begun during the New Deal and resurfaced in 1945, when Emerson C. Custis, a real estate developer, made several efforts to elicit the interest of the Dock Street dealers, the railroads, and other potential investors. The trade was not enthusiastic about the project, especially since the Pennsylvania Railroad already had a freight terminal at the base of Dock Street as well as a state-of-the-art produce terminal near the site proposed by Custis. The B&O and Reading Railroads were

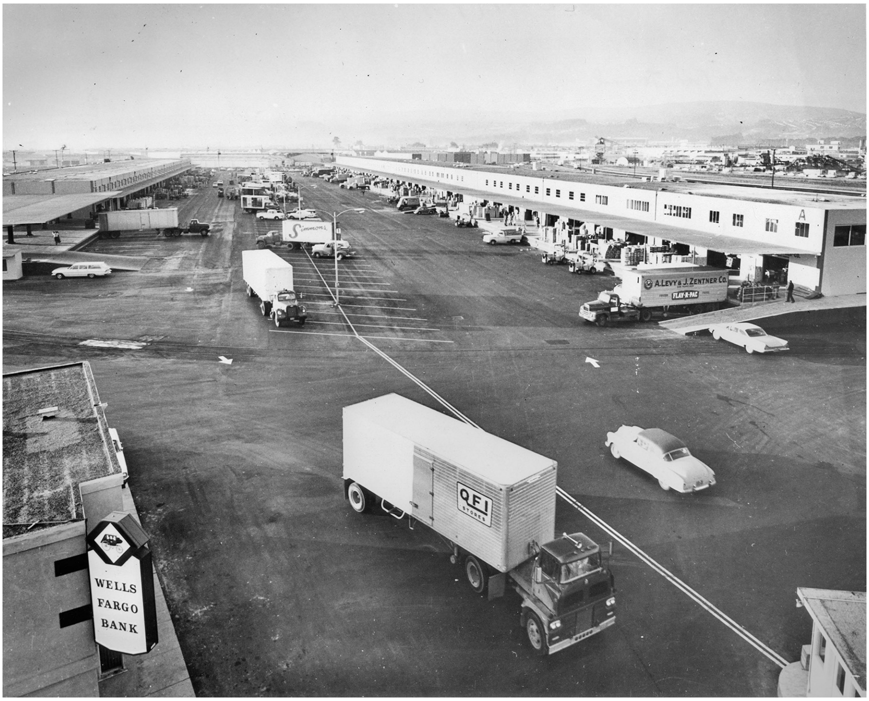

Figure 6.4. *New Golden Gate Food Terminal, San Francisco, California, ca. 1962.* Courtesy Hagley Museum and Library.

equally lukewarm since they, too, already had freight facilities in South Philadelphia.[49]

The status quo for Dock Street soon ended with the appointment of Edmund Bacon as executive director of the Philadelphia City Planning Commission in 1949—a post he held until 1970. The influential urban planner oversaw the city's most ambitious projects, including the relocation of Dock Street Market and redevelopment of Society Hill. Bacon hosted a special meeting of the Urban Land Institute (ULI) at the Ritz Carlton Hotel on January 18, 1951, to generate debate on the Dock Street issue. On hearing the testimony of produce merchants, the city planning commission, the redevelopment authority, and architects and real estate men, the twelve-member ULI panel composed of leading businessmen recommended that Dock Street "be abandoned as a food market and a modern, efficient wholesale market established at Delaware and Oregon avenues." A key factor behind the recommendation was its conclusion that a produce market was an industrial land use best kept separate from the general public—a position also supported by the Greater Philadelphia Movement and William Crow from the USDA. Pressure on Dock Street came from many directions, but Hugh Potter, prominent Houston real estate developer and one of the ULI panelists, recollected that Edmund Bacon had finally convinced downtown property owners that the Dock Street Market "should be rooted out and moved to the suburbs where it belonged."[50]

Construction on the new $100 million food distribution center on Delaware and Oregon Avenues began in 1958 based on a set of earlier designs and a scale model prepared by the USDA. The complex accommodated not only the Dock Street produce merchants but also Philadelphia's meat and dairy product wholesalers, food packers and processors, packagers, and allied industries.[51] In anticipation of the opening, *Business Week* reported that "Philadelphia's quaint but overcrowded Dock Street will expand into a big food distribution center in another part of the city." The Philadelphia Regional Produce Market promised to make Philadelphia "a major distribution point for the East Coast area"—news that made the New York dealers quake in their boots.[52]

A "Food Industrial Park" for New York City: Hunts Point

While the rest of the country forged ahead, merchants in the Washington Street Market wholesale district in Lower Manhattan worried about their steadily declining business coupled with bad press. According to the 1957 *Business Week* article touting the progress in Philadelphia, the amount of food passing through the New York market had dropped by some estimates as much as 20 percent in the past twenty years. Other telltale signs indicated that the New York market headed for trouble. An overhead highway carried a constant stream of traffic through the heart of the market. In 1953, the United Fruit Company moved its fruit-handling activities to a new, company-owned terminal on the New Jersey side of the Hudson River at Weehawken. Luxury liners replaced working vessels at the piers on the Manhattan side of the waterfront. Deterioration of the Washington Street Market was also pitched in terms of its physical condition—an argument with a long life and history of its own. According to the New York State Temporary Commission on Agriculture, "obsolete handling with an almost lack of labor-saving equipment, too-narrow streets, ramshackle buildings, lack of parking space, [and] numerous encouragements to insanitation, all combine to create a costly congestion, waste of produce, and a general condition of utter confusion." In short, “the Washington Market of 1953 was, for the most part, the Washington Market of 1900.”[53]

Even the dealers came to realize, much as they had resisted moving for decades, that the physical condition of the market, coupled with its economic stagnation, made it unsustainable. Their infamous inertia prompted the Transportation and Facilities Branch of the USDA to contract with the Stanford Research Institute for a thorough study of the situation in 1956. Howard C. Nielson, a student in Stanford’s Graduate School of Business, took on the project for his dissertation in marketing and worked closely with those who were intimately familiar with the issues—William C. Crow and Harry G. Clowes of the USDA; Marius P. Rasmussen of Cornell University; and Anthony Masciarelli, commissioner of the New York City Department of Markets. Nielson interviewed 50 of the 206 produce dealers who identified themselves as operating in Lower Manhattan—most of them self-described receivers, jobbers, or purveyors. Regardless of specialization, the merchants generally agreed that a new market was necessary. Since their sons reportedly were not following them in the business, they hoped a new market might attract “young, intelligent businessmen” into an industry that was otherwise on the verge of “collapse.” The merchants complained of declining sales due to competition from chain store warehouses and other outlets, including the nascent Philadelphia Regional Produce Market, which had already “siphoned off business from the New Jersey growers.” When asked to comment on the physical state of the Washington Street Market, one informant believed that “the best solution to our marketing problem is to strike a match at North Moore Street and make sure the fire goes all the way to Park Place.” Edward T. Finneran, a leading purveyor, hoped for an equally apocalyptic event and remarked: “The only thing that will change the existing frightful facilities is—an atomic bomb.”[54]

A forced blitz of the old market was within sight when David Rockefeller, chair of Chase Manhattan, founded the Downtown–Lower Manhattan Association (D-LMA) in 1958. The D-LMA brokered the future land use and redevelopment of “one of the most valuable and uniquely situated pieces of real estate in the world.” Quick to release its first public report, the D-LMA described Lower Manhattan as “decaying at the edges” due to the “slow economic strangulation” caused by the Fulton Fish Market on the east side of the waterfront and the Washington Street produce market on the west side. The wholesale markets were “a leftover service from the earlier city,” and the D-LMA called for immediate action to relocate them at suitable sites elsewhere in New York City. Just as the wholesale leveling of a produce district in any large city could clear the decks for what the ASPO dubbed earlier as a “Rockefeller Center–type” development, it was especially possible to achieve in New York. Rockefeller Center, the twenty-two-acre development of commercial buildings in Midtown Manhattan, had come to epitomize “ensemble planning” and the use of superblocks in New York real estate development at midcentury. Although the D-LMA report admitted to “no glowing visual projections of a future lower Manhattan,” it secured a place for the D-LMA as a major force behind the superblock project that surpassed all others when the old produce market became the site for the World Trade Center.[55]

The fate of the produce market came as no surprise, since the D-LMA report echoed and gave credence to earlier recommendations by the Department of Markets, the City Club of New York, and the New York State Chamber of Commerce Committee on Lower Manhattan Redevelopment, also chaired by David Rockefeller. Mayor Robert Wagner moved speedily to present the report to the Board of Estimates and to the city departments affected by the plan, which now had the backing of prominent dealers and business leaders.[56] According to a recent state law, the New York State Legislature would appropriate up to one-half of the maximum amount certified by the State Commission of Agriculture needed for building the new public market, and the city would pay the remainder of the costs of acquisition of land and construction, repair, or improvements.[57]

With the fiscal and legal authority to act, the city held a two-day auction of 357 parcels of land in the redevelopment sites—a dramatic sale that ended with $5,656,551 in net proceeds for the Bureau of Real Estate. A sign that times had changed for the old produce district was the sale of the landmark Washington Market retail building on the ground that served as the city’s principal public market since 1812. Dover Management of Brooklyn won the bid and razed the market building in January 1960.[58]

Once redevelopment plans for Lower Manhattan were within sight, the city hired Madigan-Hyland (engineers) and Skidmore, Owings & Merrill (SOM; architects) to prepare a comprehensive study for relocation of the Washington Street Market to Hunts Point in the Bronx. The New York City Terminal Market would cover a 126-acre triangular site bound by the Bronx River, East Bay Avenue, Halleck Street, and Lafayette Avenue. Madigan-Hyland and SOM were not newcomers to the project: Madigan-Hyland had been consulting engineers for the city’s market projects since the La Guardia years, and SOM had achieved notoriety as one of the leading architectural firms in the city as well as the planning consultants for the D-LMA.[59]

Edward J. Mathews, of SOM and the partner in charge, along with Russell Ford, the project manager, noted the firm's compliance with USDA standards, the operational needs of the city Department of Markets, and the requirements of the produce trade. Their preliminary studies for the Hunts Point terminal credited the contributions of William Crow and Harry Clowes from the USDA and of city market commissioner Anthony Masciarelli. Representing the trade were Mark Yeckes, Stephen D'Arrigo, and Robert T. Cochran—produce dealers in the Washington Street Market and members of the New York branch of the UFFVA. The collaborative effort required a synthesized approach to the design, and SOM's schematic drawings and attractive imagery provided architectural panache to a project long in the hands of USDA bureaucrats who considered architecture second to market ownership, management, and operation. SOM's preliminary studies aimed to appeal to city and state officials, market dealers, and financial backers who hoped that the market would exceed all others in the country.[60]

The preliminary designs and subsequent publicity stressed "fluidity" and "flexibility." The 240 proposed store units would serve the current number of businesses operating in Lower Manhattan plus room for any dealers from the Bronx Terminal Market interested in moving to the Hunts Point facility. A two-hundred-foot-wide area for double truck parking separated a pair of parallel store buildings further subdivided by driveways for truck circulation in the east-west direction. Rail access to the site was from the north, and motor vehicles entered the complex from the south, so that the two modes of transportation would not interfere with each other.[61] The layout also considered room for expansion, tempting market commissioner Masciarelli to announce prematurely that the Fulton Fish Market might move there in order to allow for development of the east side of Lower Manhattan. Robert Moses, the city's construction coordinator, stated emphatically in a radio broadcast that moving the Fulton Fish Market was "a long, long way off"—calling it "just a gleam in the eye of some of the architects who have been making pictures." According to Moses, two unions controlled the fish market and were bitterly opposed to leaving.[62] Besides, redevelopment efforts in Lower Manhattan focused on the west side, where the city slated the site of the produce market for a huge office complex.[63]

William Crow supervised the published report for the Hunts Point project on behalf of the USDA, and Catherine A. Perry prepared the scale model. After several public presentations, the Board of Estimates approved $38,717,833 for site preparation, the building of an underpass below Bruckner Boulevard to accommodate a rail spur from the New Haven Railroad, the actual construction of the market buildings, and, finally, rail development and street paving. The New York City Terminal Market would supposedly save $11 million a year in waste, deterioration, pilferage, and inefficient handling costs; it would operate on a self-sustaining basis with income from rentals; and its financing would fall outside of the city debt limit, with the total cost amortized over a thirty-year period. The city was pleased to report that the project was moving ahead with important commitments and deposits from Washington Street dealers anxious to secure space in their new quarters.[64]

Construction began on March 27, 1962, with a groundbreaking ceremony officiated by Mayor Robert Wagner. Joining Wagner at the podium was USDA secretary Orville L. Freeman, whose speech linked the benefits of the vast project with the goals of the Kennedy administration's farm program (fig. 6.5). Secretary Freeman promoted the market terminal to the farmers,

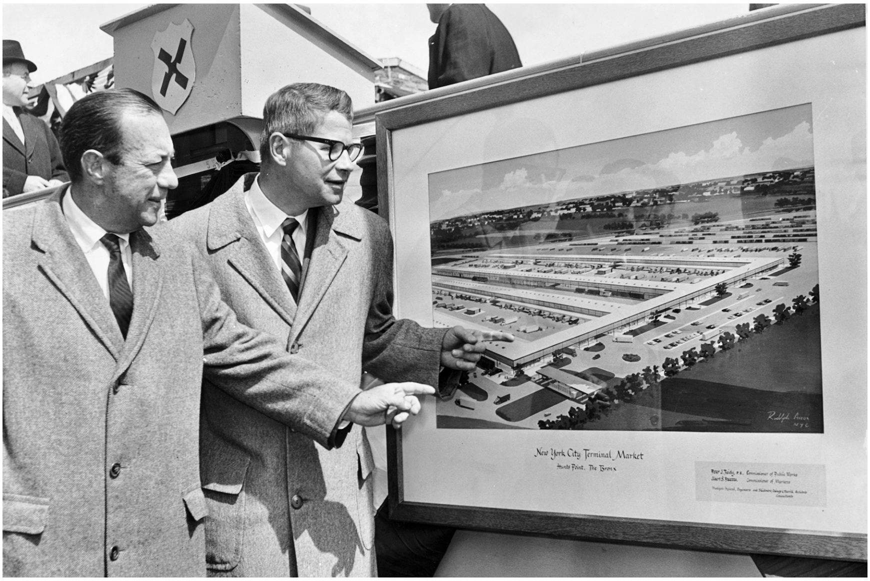
New York City Terminal Market
Hunts Point, The Bronx

Figure 6.5. *New York City Mayor Robert Wagner and USDA Agriculture Secretary Orville Freeman Preside at the Groundbreaking Ceremony for the New York City Terminal Market at Hunts Point in the Bronx in 1962.* Library of Congress, Prints and Photographs Division, NYWT&S Collection, LC-DIG-ppm-sca-12699.

whose incomes would rise not because of a free market but by proper supply management. The implication of Freeman's message was that farmers would achieve better prices for their goods if they continued to produce at their current record-high levels, since the market terminal and its efficiencies in storage and distribution were capable of managing overproduction. The argument that high levels of food production could be met by large, consolidated market facilities soon came to extend beyond fruits and vegetables, for just one month after breaking ground the USDA urged the city to consider moving the meat, poultry, fish, butter, and egg wholesalers to Hunts Point.[65]

The produce terminal building for fruits and vegetables was the first section to open at Hunts Point. News of opening day, March 6, 1967, reported that three thousand trucks had passed through the gates free of charge. The first hauler to arrive was driver John Broadnax, from Hackensack, New Jersey. Broadnax drove into the terminal with his twelve-ton truck pulling a thirty-five-ton trailer jammed full with sacks of onions from Elba, New York—excited to find a parking space and a quick buyer. Mark Yeckes, a partner in the firm of Yeckes-Eichenbaum, who spent fifty years at the Washington Street Market, "beamed his pleasure over the spacious new quarters of his wholesale house in Building A of the terminal."[66]

Publicity photographs and blueprints of the terminal point to the effort of SOM architects to address the specific requirements of various users of the facility, including truckers who delivered at night, wholesale dealers who needed storage and office space, and retail merchants who purchased their stock in the early morning hours. SOM, a leader in glass-and-steel building construction, designed skyscrapers that looked like "welcoming lanterns" in the night, so it was even more fitting that the firm applied the glass curtain wall and special lighting effects for a market terminal whose peak hours of operation were nocturnal. Services such as the branch bank, barbershop, and restaurant featured transparent clerestory windows, doors, and wall dividers. The firm employed cool fluorescent lighting in the stores in order to aid the sale of merchandise without the use of heat-emitting lamps. Retail merchants had well-lighted spaces in which to inspect goods and load them from the wholesaler's platform directly onto their trucks. Soft canister lights in the ceiling created a casual and relaxed atmosphere for off-duty workers in the restaurant.[67]

In addition to special lighting strategies, SOM blueprints for tenant signs and shops reveal the firm's keen awareness of the needs of specific dealers who had already signed leases for stores in the terminal. Two types of signs with the name of the firm were provided for in the plans: one suspended from the awning and hung perpendicular to “the street”—the platform that buyers would use to go from dealer to dealer. Another type placed the firm’s name directly on the face of the store awning, to make it visible for truckers and retail merchants driving through the terminal. The store designs emphasized the bold horizontal lines that demarcated the platform, awning, and upper story, as well as the vertical lines that depicted tailboard height, and each store was equipped with a rolling steel door for security and protection from the elements. Sticklike human figures animated the blueprints, with workers moving in upright positions—pushing hand trucks through an unobstructed space between the truck and the store; a stylized drawing of a manager, equally stress-free with hands in pockets, stands by to observe. SOM’s architectural drawings and schematic sketches reinforced the terminal as a place of calm and order, without chaos and backbreaking labor, where each firm could enjoy spatial independence, and where the unloading of trucks for one dealer would not interfere with one’s neighbor.

The New York City Terminal Market was a culmination of everything that the USDA had wanted in a wholesale produce market, and the outcome was also the product of an architectural firm well versed in handling complex projects, the latest in design and construction, and a team-building approach. These assets contributed to the choice of SOM for other large market projects.[68] SOM received a contract to investigate the possibility of relocating the Fourteenth Street Meat Market to the Hunts Point terminal in addition to moving the city’s wholesale dealers in poultry and butter, eggs, and cheese. This study formed the basis of the city’s master plan to develop the Hunts Point terminal into a “food industrial park,” using additional land purchased from Consolidated Edison, south of the produce terminal. With 325 acres in hand, the city announced the coming of an all-inclusive food distribution center—the type advocated by the USDA and proven successful in Philadelphia.[69]

Between 1967 and 1974, New York City developed downtown property formerly devoted to the food trades for other uses, as it sought to fulfill its dream of expanding Hunts Point into a “gigantic wholesale supermarket.” The Hunts Point Cooperative Market organized in order to lease and manage the expansion south of the produce terminal. Central to the site were three two-story buildings designed to attract leaders in the food industry who received raw products for processing and packing directly into their facilities. Vita Foods, the world's leading packer of herring, was the first to commit to the move, so that it could consolidate its five smaller plants scattered throughout the metropolitan area. Deepwater Refrigeration was another important tenant, who planned to make use of a two-berth pier that the city constructed for second- and third-generation container ships. Some of the city's major meat distributors formed the Hunts Point Meat Cooperative, whose members could receive, process, and distribute domestic provisions on an unprecedented scale, with warehouse space to stockpile palletized cargo and walk-in coolers and freezers with a capacity of four million cubic feet. Added to this was a separate refrigerated warehouse that could handle more than seven hundred million tons of imported meats and produce annually. City leaders regarded the Hunts Point terminal as living proof of the "prosperity and diversity that result when industry and commerce and city government are all active participants in the economic development process."[70] Visitors from every corner of the world came to see the Hunts Point market to get ideas on how to implement similar facilities in their own countries—a sign of what New York mayor John Lindsay declared was "just the beginning of an avalanche."[71]

Jessup, Maryland, Joins the Food Map

Mayor Lindsay's prediction that the Hunts Point terminal would trigger an avalanche of new wholesale markets nationwide and even abroad was not far-fetched. The completion of a terminal in the nation's largest market for fresh produce was a major victory for experts in the USDA who had been pushing the idea for decades. Dealers elsewhere who were resistant to moving now had reason to reconsider—especially with working models in key cities such as New York and Philadelphia. Baltimore was next in line. In 1964, an estimated 1.7 million tons of produce moved through the hands of two hundred independent wholesale firms concentrated for the most part at the Camden produce district, Center Market (the municipal Marsh Market and Wholesale Fish Market), and the Pennsylvania Produce Terminal (Bolton Terminal) near North Avenue. Truck delivery accounted for 60 percent of the incoming produce; railroads handled 40 percent; and boat and air deliveries were negligible. Produce was destined for consumption in the city or redirected to points throughout Maryland, Pennsylvania, Delaware, West Virginia, Virginia, and Washington, DC.[72]

The Baltimore retail grocers abhorred the wholesale facilities, both publicly and privately owned, and had been agitating for a consolidated truck terminal outside of downtown since the 1940s. According to a survey of its membership, the Independent Retail Grocers Association identified 1,804 food stores operating in Baltimore in 1945. Nearly all of the grocers reported purchasing their merchandise exclusively from the downtown markets out of necessity and for lack of other alternatives, despite the fact that many of their stores were located north of North Avenue—the city's historic northern border. Grocers with their own trucks complained about traffic congestion at the markets, and those who hired transport complained of receiving late deliveries. They also complained of not having the advantages of the large chain stores, which were financially able to circumvent normal channels by handling large deals, buying by the carload from shipping point operators, or buying a crop before harvested. Furthermore, the independent retailers in Baltimore were prejudiced against the locally grown produce that dominated the supply at the wholesale markets, because they considered it to be inferior in quality and because the availability of local produce depressed prices relative to high markup products that were imported, out of season, frozen, processed or packaged.[73]

The State of Maryland acted on the recommendation of the Council of State Governments when it passed an act to establish the Commission on Baltimore Wholesale Fruit and Vegetable Markets—a body that represented the mutual interests of farmers, wholesalers, retailers, and consumer groups. The commission recommended a new wholesale market for Greater Baltimore located on affordable land and accessible to major produce-carrying railroads, highways, proposed expressways, and the major street system of Baltimore. Such markets "would not interfere with plans for the city's present and future development" and would help resolve the future of produce districts deemed "blighted" by the state planning commission. It would also satisfy the unified desire to "keep up with the market improvements of other eastern cities in order to maintain [Baltimore's] position as a regional distribution center of produce."[74]

The state legislature took measures again, in 1955, when it chartered the New Marsh Wholesale Produce Market Authority to establish a market on Pulaski Highway for the downtown fruit and vegetable dealers whose businesses were blocking the city's plans for new arterial thoroughfares. Local business leader Samuel M. Hecht—executive of the Hecht Company department store chain—chaired the market authority, whose first task was to secure the site currently used for an abandoned motor vehicle facility on the eastern edge of the city. William Crow, of the marketing facilities branch of the USDA, provided the technical advice on the design and layout for the market at a slide presentation held in the Hecht Company boardroom on August 23, 1956.[75] In an effort to lobby the state for construction funds, Hecht informed Maryland governor Theodore R. McKeldin of the project's urgency, since Baltimore was "now being bypassed by the produce growers, and we are not getting the best quality foods as they are shipping them to Philadelphia, New York and Pittsburgh." Citing warnings from "the department of agriculture experts," Hecht warned the governor: "The only way to stall the diversion of Maryland produce from Baltimore was to build a modern wholesale produce market and join the growing list of cities around the country that have already done so, such as San Antonio, St. Louis, San Francisco, and Atlanta." Hecht had even more reason to worry that Baltimore would lose a share of the region's wholesale food market after reading the *Business Week* article that touted the new terminal in Philadelphia.[76]

Hecht also tried to obtain federal assistance for construction of the Pulaski market from the USDA and from "slum clearance" funds but was unsuccessful. Ultimately, the market authority financed construction with revenue bonds (payable from the earnings of the facility). According to Albert Hiaback, a municipal bond analyst from New York, revenue bonds had recently funded the new Lexington Market in Baltimore, Genesee Market in New York State, and the Atlanta State Farmers' Market. Since investment banks had no experience evaluating facilities, the onus for educating bond investors about assessing credit risk fell to market sponsors, who would do well to "retain consulting engineers of national reputation and then have designs approved by the state department of agriculture."[77]

Following this advice, the market authority selected architect Cyril Hebrank for the job, after receiving a copy of his credentials. Hebrank, a graduate of the University of Pennsylvania's Department of Architecture, had a practice in Baltimore whose projects included residential work in Guilford and Homeland, public housing, schools, gymnasiums, the small mammal building at the zoo, and the Cross Street Market. On June 11, 1958, Mayor Thomas D'Alesandro Jr., as chair of the city's architectural commission, appointed Hebrank to prepare the drawings and specifications for facilities on the triangular site deeded by the city to the market authority. With a budget not to exceed $1 million, Hebrank presented a restrained plan that included a main building divided into twenty-one stores, an entrance gate, gas station, office, bank, and produce shed, as well as a 100-car parking area and a 120-truck parking lot in the rear.[78]

The Pulaski market opened in 1960 with some of the produce dealers from the downtown Marsh Market, but it was never a model market. Dealers who had once enjoyed proximity to their sources of supply at the rail and ship terminals downtown felt marginalized by a further split in the city's wholesale trade. They also complained of unpleasant odors from the nearby landfill and of sagging pavement that did not stand up to the weight of their produce trucks. Moreover, the Pulaski market was no match for the food industrial parks in Philadelphia and New York. Not surprisingly, on April 21, 1967—just one month after the Hunts Point terminal opened in New York, the state of Maryland signed into law an act to create the Greater Baltimore Consolidated Wholesale Food Market Authority (renamed the Maryland Food Center Authority). This move anticipated the closure of the "congested and inefficient" market on Pulaski Highway and the absorption of its business by a far more ambitious effort that put Jessup, Maryland, on the food map. The 1967 act authorized the sale of $4 million in state general obligation bonds and $8 million in revenue bonds to finance a new wholesale food center in Jessup that would consolidate the food marketing, storage, distribution, and processing that heretofore operated within the city.[79]

The declared urgency for a comprehensive removal of city food marketing from the downtown area was the Inner Harbor and City Hall Plaza urban renewal program and an extensive highway project. Backed again by William Crow and other experts in the USDA, the food center authority considered five possible sites for a regional food distribution center. Representatives from the UFFVA toured the five sites and settled on the one in Jessup—an unincorporated community in Howard and Anne Arundel Counties. The Howard County commissioners and the regional planning council also approved the Jessup location, which was already in a light industrial and agricultural zone. The site's attraction was the availability of approximately four hundred acres near the intersection of US Route 1 and Maryland Route 175, with easy access to two major metropolitan areas—Baltimore and Washington. Jessup was near the Baltimore-Washington Expressway, Maryland Route 3, the proposed Interstate 95, and Friendship Airport (now Baltimore/Washington International Thurgood Marshall Airport). The site's proximity to the Chesapeake and Ohio / B&O rail corridor between Baltimore and Washington facilitated an eventual extension of Chessie system tracks to the food center's property line. Added to these advantages was the site's estimated twenty-minute drive for shipments of produce originating at the Port of Baltimore (fig. 6.6).[80]

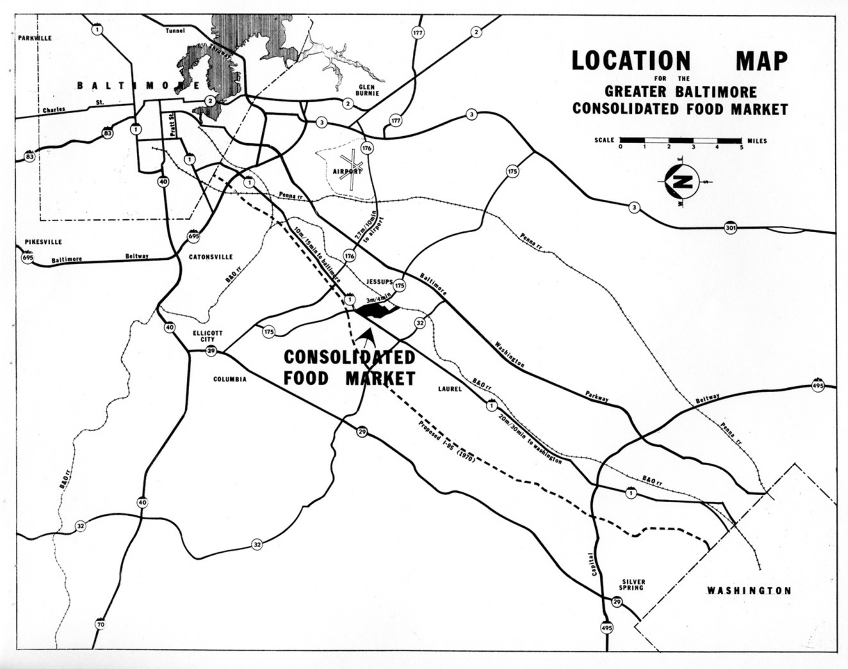
LOCATION MAP
FOR THE
GREATER BALTIMORE
CONSOLIDATED FOOD MARKET
SCALE
0
1
2
3
4
5
MILES
N
E
S
W
PARKVILLE
Tunnel
Thruway
BALTIMORE
Charles
St.
Pratt St.
GLEN BURNIE
AIRPORT
Penna rr
PIKESVILLE
Baltimore
Beltway
CATONSVILLE
B&O rr
10m/15min to baltimore
7.7m/10min to airport
JESSUPS
3m/4min
ELLICOTT CITY
COLUMBIA
CONSOLIDATED FOOD MARKET
LAUREL
Baltimore
Washington
Parkway
B&O rr
20m/30min to washington
Proposed I-95 (1970)
Beltway
Penna rr
Capital
SILVER SPRING
WASHINGTON
1
2
3
29
32
40
70
83
175
176
177
301
495
695

Figure 6.6. *Location Map for the Greater Baltimore Consolidated Food Market, 1970.* Greater Baltimore Consolidated Wholesale Food Market Authority, University of Baltimore Langsdale Library Special Collections.

The Maryland Food Center Authority purchased 65 percent of its acreage from the Maryland House of Corrections and the remaining from private property owners. The authority then sold small lots (for four times what it had paid per acre) for warehouse operations to Giant Food, the national chain store operator; Distribution Centers, a midwestern dry-storage firm; and Smelkinson Brothers, a Baltimore-based dairy products wholesaler then located in the Camden area. The food center authority hoped that the presence of national and local industry leaders would form a nucleus for the site and attract dealers from Baltimore and Washington to relocate there. Dealers from Washington were not interested in moving to Jessup, and dealers from the Bolton Terminal and Pulaski market in Baltimore played a game of chicken as they reluctantly signed “letters of intent” to leave downtown for new leases at Jessup. Meanwhile, the food center authority toured the Philadelphia terminal in order to observe a modern food center in action, as it proceeded with construction of the Maryland Wholesale Produce Market (MWPM)—the first phase of the project designed to accommodate up to sixty-four fruit and vegetable dealers. Based on USDA guidance and according to its scale model, the MWPM opened in 1976, after the food center authority finally secured commitments from the Baltimore dealers. Once the fruit and vegetable trade established itself at Jessup, so, too, did the seafood trade after the city closed the municipal fish market in 1984.[81]

The exodus of the wholesale trade from downtown Baltimore continued in earnest. According to a 1964 study conducted by the USDA, seventy-one wholesale dealers were operating in Baltimore City. In 1987, only six dealers remained; twenty-two firms were operating at the MWPM in Jessup, four in Carroll or Baltimore Counties, and the rest had either gone out of business, merged, or shifted to other forms of trade. Other changes occurred between the two study periods, such as a decline in interdealer trading. Whereas 25 percent of the produce arriving in Baltimore traded among dealers in 1964, this interdealer trading was insignificant by 1987, owing to changes in the structure of wholesale marketing at the MWPM. The 1987 study revealed a growing popularity for customer pickup among storeowners and institutional buyers from Maryland and neighboring states, who found it easy to buy merchandise from a number of wholesalers at Jessup—wholesalers whose firm size, storage space, and product line diversification were greater relative to their levels of operation in downtown Baltimore in 1964. The trajectory of the trade from Baltimore City to Jessup, Maryland, was indicative of the common wisdom among wholesalers that "locating at a food distribution center may improve [their] competitive position" because of handling efficiencies.[82]

The RMA set into motion the transformation of wholesale food marketing in the American city after World War II—a transformation characterized by the exodus of wholesale activity from central markets and the move of dealers to specialized industrial parks located in suburban areas. Experts in the USDA were key agents in this exodus, as their research and reports declared modern and efficient facilities to be decisive factors for the long-term survival of the trade. Throughout USDA engagement with state and local officials, city planners, consumer groups, and industry leaders, the agency promoted model markets within a historical narrative that framed the binaries of tradition and modernity, and old marketplaces and suburban food centers. William Crow summarized this narrative in the 1960 *Yearbook of Agriculture*. As he described, far-reaching changes resulted from the inability of existing marketplaces to meet the city's food supply needs as the population increased. Downtown commercial development and high-rise buildings blocked any hope of expansion and rendered it impractical to extend railroad tracks to wholesale stores. The constricted space resulted in big cartage bills, high labor costs, loss of time, confusion, and deterioration and spoilage, and firms needed more space to repackage products before delivery. Although the railroads attempted to solve the problem by building their own terminals, they kept the truckers out and caused split markets. Wholesale dealers ultimately responded to the crisis by supporting construction of new facilities on large tracts of inexpensive land, where they could operate near refrigerated storage warehouses, freezing plants, and canning factories, instead of operating in crowded conditions at center-city docks, piers, and rail yards. The replacement of live poultry markets with mechanized poultry processing plants as well as the proliferation of supermarkets also contributed to the exodus of city marketing. In the case of supermarkets, they handled thousands of items, many of which did not exist before the war, and they located their supply warehouses within easy reach of their suburban outlets.[83]

Experts in city marketing had argued for decades that modernization would depend on new facilities, technologies, and institutional and organizational innovation. In 1929, Walter Hedden, noted author of the term "foodshed," wrote of the need to overcome the barriers that directed the flow of foodstuffs—the dikes and dams that control and often stem new streams of produce. These barriers took physical form, as dealers in the twentieth-century city still operated within the confines of buildings and spaces inherited from the late nineteenth-century produce district. Hedden also identified certain business practices, legal constraints, and the lack of a unified organization that could operate the market outside of any one special interest group as factors that hindered efficient flows in the supply and distribution of produce.[84] The BAE under the New Deal did bring energy and expertise to the improvement of city wholesale markets, and in mapping the food supply and designing regional terminals, the agency redefined city food marketing and distribution as a function of the state. The establishment of market authorities operating as quasi-public agencies under state law after World War II ushered in a new era for wholesale produce markets that guaranteed the state's economic intervention in urban food marketing and distribution.[85]

Yet even with new instruments for financing and operating wholesale markets, the last remaining obstacles to the exodus of city marketing were the wholesalers, who held out until the old produce markets could no longer survive urban renewal and highway development. In 1958, when the USDA surveyed 52 wholesale produce markets throughout the United States, the 5,200 wholesalers represented by the surveys were not very sanguine about the future of the business. About 400 wholesalers expected to go out of business in the next few years, and nearly 750 dealers had plans to change their business practices by getting into frozen foods or more direct buying from shipping points. The surveys also reported an increase in the number of firms operating as packer-shippers, tomato re-packers, importers, and produce truckers as compared to those operating in 1938. Common among dealers operating in 1958 was a frequent turnover of ownership and management, owing to ease of entry and exit in the business. Their fortunes were relative to the few large-scale organizations, and in general, the wholesale produce business provided a comfortable living for its owners and managers, who regarded innovation with indifference. These behavioral characteristics ultimately contributed to their compliance in moving to industrial parks.[86]

One thing was certain. The wholesaler was the keystone, not the pariah, of the urban food marketing system—and a principal factor in guiding the fate of traditional marketplaces that had served cities for centuries. The task for the wholesale food trade was to guarantee a place to receive goods and redistribute them to retail storeowners and institutional buyers. New facilities consolidated and standardized the various functions of the trade, and site selection maximized efficiencies in receiving and redistributing produce. These principles presumed that location near the densely populated parts of the city and the consuming public was no longer necessary. Metropolitan and regional in scope, the food distribution center had come into its own as a new place to house the trade into the future. These semi-urban industrial food parks allowed cities and states to maintain control of food marketing and distribution while satisfying a desire to free downtown real estate for more lucrative development projects. Envisioned and designed according to the principles of agricultural economics, the wholesale produce market evolved during the twentieth century to embrace the middleman and to secure a place for intermediaries in the food industry to supply major metropolitan areas—while operating outside of them.

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Conclusion

Many liberal bureaucrats and policymakers in the USDA embraced the modernization of city wholesale markets as a principal goal and applied their energy and knowledge to international development and its promise of new frontiers. The nascent Food and Agriculture Organization (FAO) of the United Nations and the Ford Foundation were important conduits for this knowledge transfer. BAE chief Howard R. Tolley (1934–1946) resigned from the USDA to join the new FAO and later went to the Ford Foundation in the 1950s. BAE chief Oris V. Wells (1946–1953) was an adviser to the US delegation to FAO conferences from 1953 to 1959 and later served as the FAO's deputy director general. M. L. Wilson, former undersecretary of agriculture under Henry A. Wallace, left the USDA in 1952 to work for the Ford Foundation in India. Edwin Nourse, the pioneer agricultural economist, author of the *Chicago Produce Market*, and then director of the Institute of Economics at Brookings, was first chairman of the Council of Economic Advisors (CEA) between 1946 and 1949—a post designed to advise the president of the United States on economic policy.[1] Walter P. Hedden, director of port development for the Port of New York Authority from 1942 to 1953, served on the American teams that led port development projects in Liberia, Israel, Tunisia, Trinidad, Korea, Costa Rica, and India.[2] Active during the peak decades of urban food marketing research, these and other leaders in agriculture moved into key positions of influence on the US-backed Marshall Plan, which funded construction of many wholesale markets in the war-torn cities of Europe and in developing countries.[3]

The postwar era marked the end of any notion that wholesale markets in Europe were superior to those in the United States. That race had ended. In fact, food wholesaling in the United States had reached the point of superiority in terms of organization, technology, and facilities—a message that government and industry were quick to export to Europe.[4] In March 1961, just months after the United States signed the convention of the Organisation for Economic Co-operation and Development, the USDA took the opportunity to promote industrialized agriculture abroad with the "Modern Foods" exhibit at the Paris Trade Fair. This was the first major US food show in France, and one that emphasized convenience foods, such as ready-to-cook turkeys, dried fruits, cake mixes, minute rice, instant nonfat milk, frozen foods, and canned goods. The promotion of processed foods in France was timely, given that the country was soon to embark on a major plan to relocate wholesalers from Les Halles, the central markets, to a new distant facility at Rungis, in the far southern suburbs of Paris.[5] The Rungis plan based its principles on modern wholesale markets in the United States—namely, a consolidated wholesale market on the outskirts of the city that would encourage new channels for selling standardized varieties and weights of perishable produce as well as processed foods for the supermarket trade. Rungis was part of a larger vision to bring France into competition with other developed countries—a vision originating with legislation enacted in 1953 to create a system of national wholesale markets. As the French government got closer to planning the new facility at Rungis, it established wholesale markets in Lyon, Toulouse, and Nice in order to gain momentum and public acceptance for the coming drastic makeover of the food marketing landscape of Paris.[6]

Popular magazines had been prepping Americans on the Paris plan for several years. A 1959 *Newsweek* article described Les Halles as "one of the world's most wasteful boondoggles," in such terms that readers could have mistaken New York's Washington Street Market as the subject of the article. Les Halles, despite its cornucopia, lacked proper storage and sanitary facilities, causing one-quarter of its daily intake to go bad during the summer; and its "downtown location, two miles from rail stations, means that shipping charges are doubled by trucking fees." Added to this were "armies of middlemen" who "take their financial bite out of every potato." *Business Week* also informed its readers that "despite nostalgic cries from tourists who would miss a sobering bowl of onion soup," leaders of the new Fifth Republic would finally reckon with the crisis. Earlier, in 1953, a proposal to move the Paris central market had "flopped because government economists couldn't unravel the maze of trading operations that baffled even Les Halles insiders." Current statistics revealed that the city of Paris consumed about 40 percent of the produce shipped in, and then dealers sold the rest to receivers in the provinces, in some cases right back to the original source of the produce. Similar faults occurred in the distribution of meat slaughtered outside the city limits at La Villette. From there, distributors trucked the meat into town to Les Halles, where others sold and trucked it back out again.[7]

The American model for food wholesaling made its way to France, when the Centre National des Expositions et Concours Agricoles invited William Crow from the USDA and several leaders in the food trade to participate in an international colloquium on wholesale marketing facilities and redevelopment in large cities, held in Paris on March 2–6, 1965. Valéry Giscard d'Estaing, minister of finance and economic affairs (and later president of France), greeted the colloquium participants at a "welcome cocktail" in the restaurant on the seventh floor of the impressive United Nations Educational, Scientific and Cultural Organization (UNESCO) headquarters. Working sessions followed over the next two days, when dozens of international delegates discussed the problems inherent in markets in large cities, the new channels of distribution, and the ways in which buyers and producers adapted to changing modes of marketing. The director of the Covent Garden Market Authority in London, leaders of the new slaughterhouse and livestock market at La Villette and the wholesale market at Rungis, the chief veterinarian of the municipal markets of Dakar in Senegal, and representatives of major food cooperatives were just some of the participants. Joining Crow from the United States were his colleagues from the Gold Kist Peanut Growers Association in Atlanta and Acme Market in Philadelphia. Crow's paper focused on the benefits of modern wholesale markets in solving the problems of old marketplaces, and he embraced the role of government in supporting the food trades by conducting research such as the USDA had done with the Research and Marketing Act of 1946. He called for sharing knowledge and improving marketing facilities around the world in the name of economic progress and international solidarity, and he invited participants to view the USDA's presentation model of the Philadelphia Wholesale Produce Market at the conclusion of his talk.[8]

With the Rungis market outside of Paris under construction and a system of wholesale terminal markets under way in France, the French government bestowed Crow with the Chevalier de l'Ordre du Mérite Agricole for having provided France with USDA guidelines for wholesale markets.[9] However, as fast as new wholesale markets opened, transportation technology continued to bring changes to even the most modern facilities. In "Science for Better

Living," the theme of the 1968 *Yearbook of Agriculture*, Crow introduced yet another transportation revolution that was sweeping the world: containerization. The USDA served on industry and government committees to establish standards for containers, devices to handle them, and international standards for package sizes. In 1965, a containerized shipment of 36,500 pounds of packaged meat moved directly from a packing plant in Fremont, Nebraska, to a supermarket in Honolulu, and Southern Railway containers loaded with grapefruit moved through the streets of Paris and over the highways of Germany, where one shipment ended at the wholesale market in Frankfurt. Containerization forced the same changes on city markets that refrigerated rail transport had done nearly a century before. Crow predicted that some warehouses would become obsolete and that all major world ports and many small ones would have container yards.[10]

Containerization has brought a sharp decline in transportation costs, as growers and other food producers load refrigerated freight containers directly at the site of production. From there, truckers deliver the containers to rail yards or shipyards for long-distance or overseas shipment, where handlers once again transfer the containers by overhead cranes back onto trucks for final delivery. Containerization lowered shipping costs to the extent that industry (including agriculture) could locate far from customers, who could enjoy an unimaginable variety of low-cost products (including perishable food) from around the globe. Since the 1970s, food wholesaling has witnessed the elimination of small "inefficient" markets, an increase in direct shipping, the modernization of extant facilities, and the merging of terminals with wholesale food distribution centers that serve large population centers.[11]

Also since the 1970s, territorial competition has forced some wholesale markets to close after larger markets absorbed their dealers with promises of improved access, facilities, and leases. This trend played out as recently as 2005, when dealers at the Fulton Fish Market in New York City relocated to a new 400,000-square-foot facility at Hunts Point in the Bronx, marking the end of one of the last working areas of the Manhattan waterfront. Still standing in the wake of the move is the Fulton Fish Market building, once operated by the City of New York Department of Markets and dedicated by Mayor Fiorello La Guardia in 1939. The imposing structure stands in silence on the East River waterfront as a testament to the lost primacy of the municipality in overseeing food marketing and distribution.[12]

The succession of bigger markets replacing older ones continues to this day, and with it an uncertain future for their predecessors. The Chicago International Produce Market opened in the south side in 2002 and replaced the South Water Market (aka Chicago Produce Terminal), which the Chicago Planning Commission sold for development of University Commons, a complex of loft apartments and retail space. In 2014, the Philadelphia Wholesale Produce Market celebrated its third anniversary. Built with $218 million in private and public funding, the quarter-mile-long, multistory, refrigerated fruit and vegetable warehouse on Essington Avenue in Southwest Philadelphia even made produce dealers at the Hunts Point market a bit jealous. They had considered relocating the Hunts Point produce market to New Jersey, where students of planning envisioned a mixed-use development for the coexistence of people and freight, but the City of New York renewed the Hunts Point lease for seven more years in an effort to stall the departure of the dealers. Meanwhile, real estate developers had their day in Denver, where the Denargo Market, once touted by the USDA as its best model for a mid-sized city, is now the site of high-rise apartments.[13]

Today, food wholesaling in the United States caters *to* the city but is no longer *of* the city. In the pursuit of greater efficiencies, the average consumer is absent from daily encounters with the wholesale trade, whose buildings, spaces, and activities no longer commingle with the urban fabric. As a result, consumers know little about the journey of food from its source to the restaurant or store, or about the people who handle it along the way. They are content as long as they are beneficiaries of a system that promises a variety of fresh produce year-round as an option or complement to frozen, canned, and otherwise processed foods. Many stakeholders, not just the consumer, however, have challenged these arguments in recent decades. New experts concerned with food security, sustainable agriculture, and nutrition are pressing for traceability in a wholesale food marketing and distribution system that has gone global. Growers of organic produce and their distributors are now major players in the wholesale trade as they continue to meet growing demand. Small producers wanting to cut out the middleman in order to save on shipping and handling costs have reclaimed their presence at city farmers' markets. Urban planners have found new opportunities for economic development and community building by revitalizing old produce districts and declining wholesale markets. Adding to the list of new stakeholders are distributors of international goods and specialty produce, who have found new customer bases in cities where large immigrant communities seek the products of their homeland. Wholesale produce distributors are also forging alliances with food banks. All of these factors are creating new wholesale markets where none had existed, and they are bringing new energy to old established ones—such as the Niagara Frontier Food Terminal in Buffalo and Eastern Market in Detroit, which were once on the urban periphery but are now food hubs for new residential and commercial neighborhoods. Even a few remaining meat wholesalers who operate amid luxury hotels and fashion boutiques in New York's Gansevoort district find advantages in being close to a density of restaurants, institutional buyers, and other customers dedicated to sourcing specialty meats local and direct from people they know.

Wholesale produce markets, designed as they are to handle enormous volume, promise the consumer exotic varieties and items that might otherwise be unavailable unless purchased in very large shipments. This factor was the genesis for the new San Antonio Wholesale Produce Market, built by Abasto Properties over several phases since 2015. The market, a consequence of the North American Free Trade Agreement, handles produce shipped from Mexico to the United States and directs US products to destinations south of the border. Viewed in the context of the history of food system planning, the San Antonio Wholesale Produce Market bears the USDA stamp of approval. The privately owned market promises commercial synergy for the food industry in the region by providing independent wholesalers with stores equipped with loading docks, office space, cold storage, and pallet space; a gas station, farmers' market, and retail strip; and land available for future development.[14]

Civic engagement and vendor participation inform the management, operation, and historic preservation of wholesale markets in Europe. The markets in Turin, such as the massive Porta Palazzo, are under the authority of city hall in cooperation with several market commissions composed of vendors. In London, more than 80 percent of the public markets operate by license under the London Local Authorities Act of 1990, which requires managers to reinvest profit in market operations or redistribute it to the vendors. Having considered several attempts to move the municipal wholesale fruit and vegetable market from central Dublin, the city remodeled the historic landmark building and provided a section for retailers. Barcelona is in a league by itself in terms of consistent public support for public markets. The city operates forty-one municipal markets—more markets per capita than any other city in Europe—and coordinates the wholesale trade with the local stallholders and other retailers who depend on it for their merchandise. Although Barcelona's wholesale produce market no longer operates downtown, the city manages the wholesale trade through a public-private partnership with Mercabarna, a company founded in 1967 to administer the wholesale food section of an industrial zone outside of the city that has access to air, road, rail, and sea transport. Between 1971 and 1984, Mercabarna moved the central wholesale produce, fish, and flower markets to the new facility, which serves as the distribution point for eight hundred food companies. Viewed in the context of age, scale, and ambition, Mercabarna is a kindred spirit with Rungis and the New York City Food Terminal at Hunts Point.[15]

Today, hundreds of wholesale produce markets representing forty countries are members of the World Union of Wholesale Markets, a nonprofit organization that promotes wholesale and retail markets worldwide. Membership is also open to national and regional trade associations, local market authorities, private market companies, and other organizations dedicated to the shared vision that food distribution is essential to human life and as such must comply with social and ethical goals. Their current US members—the San Francisco Wholesale Produce Market, Maryland Food Center Authority, and Detroit's Eastern Market Corporation—have histories that remind us of long battles that ensued over the geographical realignment of the marketplace for fresh food from the central produce district to planned food terminals. As this book demonstrates, food wholesaling was, and remains, a dynamic and material reference point for understanding the promise and limits of delivering fresh produce in a global food economy.

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NOTES

Introduction

1. For more on the Maryland Food Center Authority, see http://www.mfca.info/ (accessed May 5, 2018). For more on the World Union of Wholesale Markets, see http://www.wuwm.org (accessed May 5, 2018).

2. “Such Is Life in Baltimore,” *Baltimore Sun*, July 6, 1947.

3. Baics, *Feeding Gotham*, provides the ultimate account of the deregulation of public markets in New York in 1843 and the consequences of open entry on the geography of provisioning in the antebellum period. His analysis anticipates similar themes that surface in the twentieth century with specific respect to the wholesale trade.

4. The classic work on the transformation of meat and grain is William Cronon’s *Nature’s Metropolis*.

5. On anti-monopoly in the telecommunication and transportation sectors, see John, *Network Nation*, and White, *Railroaded*.

6. The new mentality of ensuring a fresh, affordable, and abundant food supply at whatever cost, as well as the institutional coalitions that fostered it, fit squarely within Leach’s thesis in *Land of Desire*.

7. Historians of federalism recognize the USDA’s early rise of influence on national affairs, the flow of knowledge, and power sharing among the states. See Carpenter, *The Forging of Bureaucratic Autonomy*; Gerstle, *Liberty and Coercion*, 185–216; and Johnson, *Governing the American State*.

8. The standard history of the city’s evolving functions, transportation systems, land use, and ideals is Fogelson’s *Downtown*. His narrative, however, does not cover food provisioning and its physical presence and functional ties to downtown. The best work on the functional obsolescence of big-city food markets in the wake of urban renewal, using as case studies Pike Place Market (Seattle), Faneuil Hall Market (Boston), and Gansevoort Market (New York), is Donofrio, “‘The Container and the Contained.’”

9. On the influence of the USDA and agricultural economists on improving business practices on the farm, see Fitzgerald, *Every Farm a Factory*, and Fitzgerald, “Accounting for Change.”

10. Chandler, *The Visible Hand*.

11. Bestor, *Tsukiji*; Miller, *Feeding Barcelona, 1714–1975*.

12. Mead, *Making Modern Paris*.

13. Taylor-Leduc, "Market Gardens in Paris"; TenHoor, "Markets and the Food Landscape in France, 1940–72."

14. Guàrdia and Oyón, eds., *Making Cities through Market Halls*.

15. Vitiello and Brinkley, "The Hidden History of Food System Planning." On the origins of animal agriculture in planning history, see Brinkley and Vitiello, "From Farm to Nuisance."

16. For example, see Fogelson, *Downtown*.

17. For examples, see Koeppel, *Banana*; Horowitz, *Putting Meat on the American Table*; Freidberg, *Fresh*; Kurlansky, *Cod*; and Estabrook, *Tomatoland*.

18. Fitzgerald and Petrick, "In Good Taste."

19. For an excellent review and assessment of recent scholarship on food history and its relevance for American history, see Garcia, "Setting the Table," and Padoongpatt, "Sitting at the Table."

20. Spellman, *Cornering the Market*; Strasser, *Satisfaction Guaranteed*; Levinson, *The Great A&P*; Deutsch, *Building a Housewife's Paradise*.

21. See, for example, Mayo, *The American Grocery Store*; Longstreth, *The Drive-in, the Supermarket, and the Transformation of Commercial Space in Los Angeles, 1914–1941*; and Tolbert, "The Aristocracy of the Market Basket."

22. Sandoval-Strausz, "Spaces of Commerce."

Chapter 1 • Shelter for the Middleman

1. For a primer on the history of governmental efforts to curb price manipulations from ancient times to the present, see Markham, *Law Enforcement and the History of Financial Market Manipulation*, 1–38.

2. *Francis Piatti, Respectfully Informs His Friends, and the Public in General, That He Has for Sale at His Store, on the Main Street, at the Corner of the Street Leading to Coutts's Ferry Below the Market House, a General Assortment of Groceries, Richmond, 1809*. Advertisement, Printed Ephemera Collection, Library of Congress.

3. Novak, *The People's Welfare*, 93–94; Hodges, *New York City Cartmen, 1667–1850*.

4. Porter and Livesay, *Merchants and Manufacturers*; Novak, *The People's Welfare*, 90–91.

5. Graddy, "Markets," 208; Horowitz, Pilcher, and Watts, "Meat for the Multitudes," 1058n11.

6. Baics, *Feeding Gotham*, 19–20; Slanetz, "A History of the Fulton Fish Market."

7. De Voe, *The Market Book*, 488–516.

8. De Voe, *The Market Assistant*, 180–90, 307; Ingersoll, *The Oyster Industry*, 242–43; Chiarappa, "New York City's Oyster Barges."

9. Tangires, *Public Markets and Civic Culture in Nineteenth-Century America*, 71–117; "The Meat Trade of This City," *New York Times*, April 16, 1871. For more on the reorientation of public markets in New York from retailing to wholesaling, see Baics, *Feeding Gotham*, 163–66.

10. Boston Joint Special Committee on Free Markets, *Report of the Joint Special Committee on Free Markets*, 24–25.

11. "Oakes Ames," in Rines, *Encyclopedia Americana*, 569–70; White, *Railroaded*, 32; Ames Plow Company, illustrated catalogue (Boston, 1876).

12. Quincy, *Quincy's Market*, 120–30.

13. Calvin D. Caldwell v. City of Alton, in Freeman, *Reports of Cases at Law and in Chancery Argued and Determined in the Supreme Court of Illinois*, 416–21. Quotes on 416.

14. Moeckel, *The Development of the Wholesaler in the United States, 1860–1900*, 13–27, 152.

15. Moeckel, *The Development of the Wholesaler in the United States, 1860–1900*, 29–31, 94–104, 114–15.

16. *A Table of Weights Obtained by Us from the Secretaries of the Different States, Showing the No. of Lbs. Which Their Laws Recognize as a Bushel of the Following Articles* . . . Agents, Raymond & Ward, Chicago, [c. 1854], Printed Ephemera Collection, Library of Congress.

17. Hall, comp., *The Chicago City Directory, and Business Advertiser*, 101, 110.

18. Cook, Hayward & Co. General Produce Commission Dealers, circular (New York, 1863), Yale University Library.

19. *Commission Merchant's Daily Report* (Baltimore: Leigh & Goodhand, 1887). Hagley Museum and Library, Trade Cat. C7342 1887.

20. Capron, "The Market Systems of the Country, Their Usages and Abuses."

21. On the early development of long-distance markets for California produce, see White, *The Great Yellow Fleet*; Danes-Wingett, "The Ice Car Cometh"; and Stoll, *The Fruits of Natural Advantage*.

22. Davidson and Sweeney, *On the Move*, 70–74; White, *Railroaded*, 167.

23. McCorkle, "Moving Perishables to Market"; Hedden, *How Great Cities Are Fed*, 39.

24. Magoon, *The Way It Was*, 166–84.

25. O'Neil, *Reading Terminal Market*, 16. In 1914, the United States Post Office Department initiated a short-lived program to ship produce directly from rural farmers to urban consumers through a parcel post system. See Ho and Vogler, "Butter in the Mail," 25–28.

26. Tangires, *Public Markets and Civic Culture in Nineteenth-Century America*, 158–62. For more on Quincy as an anti-monopolist, see John, *Network Nation*, 85–86, and White, *Railroaded*, 7–8, 111–12.

27. Central Market Company v. Erie, 44 Pa. Superior Ct 183 (1910), 191–99.

Chapter 2 • The Produce District

1. The National Register of Historic Places designates and maintains the list of significant market houses, warehouses, and commercial districts noted for their physical unity and historical contribution to the development of the food industry. Notable examples include the Pike Place Public Market Historic District in Seattle, the Strip District in Pittsburgh, the Gansevoort Market Historic District in New York, and the historic warehouse districts in Cleveland, Minneapolis, Oakland, Pocatello, and Wichita.

2. Robinson, *How to Live*, 301–15.

3. "The New Market Stand: Its Formal Opening Yesterday Afternoon," *New York Times*, March 22, 1879; "Farmers Doing Business," *New York Times*, September 23, 1883.

4. Cooper, *To Market, to Market, in Wilmington*, 27–28. For more on the management of horses in the nineteenth-century city, see Greene, *Horses at Work*, and McShane and Tarr, *The Horse in the City*.

5. Cooper, *To Market, to Market, in Wilmington*, 30–31.

6. On patterns of development in American commercial architecture, see Longstreth, *The Buildings of Main Street*, 24–35, 76.

7. Willard quoted in Watts, *Report of the Commissioner of Agriculture for the Year 1873*, 454–55.

8. Tilly, "Food Supply and the Public Order in Modern Europe."

9. Schmiechen and Carls, *The British Market Hall*, 35–44; *An Act for Abolishing the Offences of Forestalling, Regrating, and Engrossing, and for Repealing Certain Statutes Passed in Restraint of Trade*, 7 & 8 Vic. c. 24 (1844).

10. Mead, *Making Modern Paris*, 144–246; Taylor-Leduc, "Market Gardens in Paris."

11. Newlands, *A Short Description of the Markets and Market System of Paris*, 8–11. For the original version in French, see Préfecture du Département de la Seine, *Rapport sur l'emplacement des halles centrales de Paris*, 30–31.

12. Newlands, *A Short Description of the Markets and Market System of Paris*, 15. For the court's ruling in full, see Cour de Cassation (France), *Recueil Général des Lois et des Arrêts*, 326–32.

13. Risch, *Bericht über Markthallen in Deutschland, Belgien, Frankreich, England und Italien*; Lohmeier, "'Bürgerliche Gesellschaft' and Consumer Interests."

14. Osthoff and Schmitt, "Markthallen und Marktplätze," 194–273. For a current reading of the impact of central markets on cities in nineteenth-century Europe, see Guàrdia and Oyón, "Introduction," in *Making Cities through Market Halls*, 11–71.

15. Royal Commission on Market Rights and Tolls, *Final Report of the Commissioners*, 17; Capron, "The Market Systems of the Country, Their Uses and Abuses," 245.

16. As Robert Fogelson has argued, the late nineteenth-century American city witnessed the development of "downtown" as a distinct business district as residents moved from the center to the periphery. See Fogelson, *Downtown*, 9–43.

17. New York City, Mayor's Market Commission, *Report of the Mayor's Market Commission of New York City*, 20–21.

18. For a broad historical account of the shop-house in Western cities, see Davis, *Living over the Store*. On the prevalence of the shop-house in Baltimore, see Hayward and Belfoure, *The Baltimore Rowhouse*, 17–19, 72–75.

19. Shockley, *Gansevoort Market Historic District*, 159–65; Dolkart, *The Row House Reborn*.

20. Shockley, *Gansevoort Market Historic District*, 144–46.

21. De Voe, *Report upon the Present Condition of the Public Markets of the City and County of New York*, 7–8, 27.

22. "The New Metropolitan Market," 105, 107.

23. Shockley, *Gansevoort Market Historic District*, 166–68. Dunn's life dates are not certain, but he was a practicing architect in New York in 1872 and remained so through at least 1894. He is responsible for designing seven buildings still standing in the historic district. See Shockley, *Gansevoort Market Historic District*, 40–41.

24. Nichols, "The Grocery Trade," 600.

25. Bradley, *Tribeca West Historic District Designation Report*, 87–88; Postal, *Austin, Nichols & Co. Warehouse*, 1–3.

26. Shockley, *Gansevoort Market Historic District*, 3; Bradley, *Tribeca North Historic District Designation Report*, 26. For more on the history of awnings, see Randl, "The Use of Awnings on Historic Buildings."

27. Shockley, *Gansevoort Market Historic District*, 13.

28. Linder and Zacharias, *Of Cabbages and Kings County*, 52–58.

29. On the development of retail grocery stores in Cleveland, see Mayo, *The American Grocery Store*.

30. Johannesen, *Cleveland Architecture, 1876–1976*, 42–43; Miller, "Markets and Market Houses"; US Department of the Interior, National Park Service, "Historic and Architectural Resources of the Lower Prospect / Huron District of Cleveland, Ohio." The Sheriff Street Market was razed in 1988 and the site was developed into a sports and entertainment complex.

31. Michael Osman provides the best account of the impact of cold storage technology on the American city. See Osman, "Regulation, Architecture and Modernism in the United States, 1890–1920," 55–89, and Osman, "Preserved Assets." For more on the impact of cold storage on the marketing of eggs and other perishables, see Freidberg, *Fresh*, and Freidberg, "The Triumph of the Egg."

32. Eisenhour, *The Strand of Galveston*; Scardino, *Clayton's Galveston*; "New Plant of the Galveston Ice and Cold Storage Co."

33. Nourse, *The Chicago Produce Market*, 5–16, 94–104.

34. Nourse was an instructor in economics and sociology before joining the Institute of Economics in Washington, DC, where he directed agricultural studies. When the institute became part of the newly formed Brookings Institution in 1927, Nourse was director of the institute and later served as vice president of the Brookings Institution from 1942 to 1946. In 1946, President Truman named him the first chairman of the Council of Economic Advisers. See *Guide to the Edwin Griswold Nourse Papers, 1908–1970*, Collection Number: 2723, Division of Rare and Manuscript Collections, Cornell University Library, 2002.

35. Nourse, *The Chicago Produce Market*, 6.

36. Knapp, *Edwin G. Nourse, Economist for the People*, 39–43; quote on 43. Knapp had been a graduate student at the University of Chicago in 1923–1924, where he worked on terminal market studies.

37. Knapp, *Edwin G. Nourse, Economist for the People*, 43n5.

38. Nourse, *The Chicago Produce Market*, 7–8.

39. Nourse, *The Chicago Produce Market*, 11.

40. Nourse, *The Chicago Produce Market*, 114–15, 248.

41. Nourse, *The Chicago Produce Market*, 202–6, 217, 231, 249.

42. Nourse considered himself a pioneer at the time, having compiled one of the earliest readers for the discipline: *Agricultural Economics: A Selection of Materials in Which Economic Principles Are Applied to the Practice of Agriculture*. See Hess, "Oral History Interview with Dr. Edwin G. Nourse," 4–5.

43. For examples, see Price, *The Marketing of Farm Products*; New Jersey State College of Agriculture and Pennsylvania State College, *The Philadelphia Wholesale*

Fruit and Vegetable Market; and Burdette and DeVault, *The Baltimore Wholesale Fruit and Vegetable Markets*.

44. Baker and Rasmussen, "Economic Research in the Department of Agriculture," 53.

45. Runge, "Agricultural Economics"; Shaars, "The Story of the Department of Agricultural Economics 1909–1972"; Gilbert and Baker, "Wisconsin Economists and New Deal Agricultural Policy."

46. Jess Gilbert, "Agrarian Intellectuals in a Democratizing State"; Rutherford, *The Institutionalist Movement in American Economics, 1918–1947*.

47. For a thorough account of the application of the social sciences at the USDA, see Larson and Zimmerman, *Sociology in Government*.

48. Hedden, "Some Results of Terminal Market Studies," in *Cooperative Marketing and City Marketing Problems*; Port of New York Authority, *Report on the Food Supply of the Port of New York District*; Hedden, *How Great Cities Are Fed*.

49. Collins, "Various Types of Wholesale Traders."

50. Weld, *The Marketing of Farm Products*, 12–22, 77–81; "Louis Dwight Harvell Weld," in Witzel, *Encyclopedia of the History of American Management*, 539–40. The term "jobber" originally referred to a merchant who dealt in special, odd, or job lots. It fell out of fashion in the late 1930s as the wholesale trade preferred to consider themselves primarily distributors and shippers of produce. For example, the Western Fruit Jobbers Association, a leading organization of jobbers founded in 1904 and headquartered in Chicago, merged with the American Fresh Fruit and Vegetable Association under the new name of the United Fresh Fruit and Vegetable Association. See "Fruit Jobbers and Shippers Now Together," *Chicago Packer*, July 3, 1937.

51. Phillips, *Wholesale Distribution of Fresh Fruits and Vegetables*, 3, 5, 239; Deupree, *The Wholesale Marketing of Fruits and Vegetables in Baltimore*, 110.

52. US Bureau of the Census, *Statistics of Cities Having a Population of over 30,000*, 38–39.

Chapter 3 • Planning the Wholesale Terminal Market

1. King, "Municipal Markets," in *Reducing the Cost of Food Distribution*, 104.

2. Brand, "The Office of Markets of the United States Department of Agriculture," in King, *Reducing the Cost of Food Distribution*, 255–59.

3. Stewart, *A Half Century of Municipal Reform*, 10, 26, 33.

4. Rodgers, *Atlantic Crossings*, 4–5, 128–52.

5. Mowry, "Municipal Markets: An Economic Necessity."

6. US Department of Commerce and Labor, Bureau of Manufactures, *Municipal Markets and Slaughterhouses in Europe*, 5.

7. US Department of Commerce and Labor, Bureau of Manufactures, *Municipal Markets and Slaughterhouses in Europe*, 7, 10, 34.

8. US Department of Commerce and Labor, Bureau of Manufactures, *Municipal Markets and Slaughterhouses in Europe*, 54, 86.

9. US Department of Commerce and Labor, Bureau of Manufactures, *Municipal Markets and Slaughterhouses in Europe*, 37–38.

10. "The Week," *The Nation*, May 26, 1910.

11. Godfrey, “The Food of the City Worker”; Gerhard, *Sanitation of Public Buildings*, 175–86.

12. Aldrich, “Tariffs and Trusts, Profiteers and Middlemen,” 693.

13. “Cost of Living”; “Where the Trouble Lies”; Weld, “High Food Prices, Middlemen, and Speculation”; Rauchway, “The High Cost of Living in the Progressives’ Economy.”

14. Historians have identified the *Puck* cartoon of the double hold-up as emblematic of the progressive desire to improve federal oversight and regulation of intermediaries in the food trade. See Aldrich, “Tariffs and Trusts, Profiteers and Middlemen,” 716; Friedberg, *Fresh*, 102–3; Osman, “Regulation, Architecture and Modernism in the United States, 1890–1920,” 90–96; and Osman, “Preserved Assets,” in *Governing by Design*, 14–18.

15. “Some Leaks in the Pipe Line,” *Nonpartisan Leader* (Fargo) 5, no. 25, December 24, 1917; Remele, “‘Things as They Should Be.’”

16. Massachusetts Commission on the Cost of Living, *Report of the Commission on the Cost of Living*, 90–118; quote on 117. Governor Ebenezer Draper appointed the five-member commission, chaired by Robert Luce, US representative from Massachusetts.

17. Hartwell, “Public Markets in Boston,” in Massachusetts Commission on the Cost of Living, *Report of the Commission on the Cost of Living*, 558–65; quote on 565.

18. Massachusetts Commission on the Cost of Living, *Report of the Commission on the Cost of Living*, 746.

19. Massachusetts Commission on the Cost of Living, *Report of the Commission on the Cost of Living*, 133.

20. Boston City Planning Board, *A Summary of the Market Situation in Boston*, 15, 26–28, 80.

21. Donofrio, “Feeding the City,” 30–41. Donofrio points out that the pioneers of American city planning were narrow in their focus on food system planning, and not until after World War I did they begin to take an increased interest in the sources of food, the preservation of farmland, and the social and cultural life of farm families.

22. Newark (NJ) City Plan Commission, *Report on Public Markets to the Honorable the Mayor and Common Council of the City of Newark, N.J.*, 7–11. Newark did, in fact, build a new Centre Market, which opened on January 28, 1924. The $5 million facility housed the wholesale and retail trade, and included a six-hundred-car parking garage and adjacent farmers’ market. See Centre Market Merchants’ Association, *Official Souvenir Book of the Opening of the New Centre Market, Newark, New Jersey*, and Grad and Hooper, “The New Centre Market, Newark, N.J.”

23. Chicago Municipal Markets Commission, *Preliminary Report to the Mayor and Aldermen of the City of Chicago by the Chicago Municipal Markets Commission*, 181–86.

24. A schematic design for the Seattle project is reproduced in Shorett and Morgan, *The Pike Place Market*, 32.

25. Thrift and Childs, “Baltimore’s Market,” in King, *Reducing the Cost of Food Distribution*, 119–27. Thrift and Childs were comptroller and deputy comptroller, respectively, in the Department of Finance for Baltimore City.

26. “Map Showing Improvements in the District Destroyed by Fire in Baltimore Feb. 7–8, 1904,” 1906, JScholarship, JHU Sheridan Libraries, Baltimore City Sheet Maps.

27. Center Market Commission [1904–1909], Reports of Meetings, Baltimore City Archives, BCA BRG42-3-1.

28. Center Market Commission [1904–1909], Reports of Meetings, Baltimore City Archives, BCA BRG42-3-1; “Baltimore’s New Wholesale Market.”

29. Center Market Commission [1904–1909], Reports of Meetings, Baltimore City Archives, BCA BRG42-3-1. The commission declared its mission accomplished to the satisfaction of the city and dissolved on January 20, 1909.

30. Deupree, *The Wholesale Marketing of Fruits and Vegetables in Baltimore*, 70–76.

31. Baltimore, Mayor and City Council, *The Baltimore Book*, 83–86; Thrift and Childs, “Baltimore’s Market,” in King, *Reducing the Cost of Food Distribution*, 119–27. For more on the City Beautiful in Baltimore, particularly during the Preston administration, see Humphries, “Baltimore and the City Beautiful.”

32. New York City, Mayor’s Market Commission, *Report of the Mayor’s Market Commission of New York City*, 19–22; Rainsford, “Existing Steamship and Railroad Terminals in the City of New York,” in New York City, Mayor’s Market Commission, *Report of the Mayor’s Market Commission of New York City*, 29–41.

33. Miller, *Municipal Market Policy*, 3–5; Miller, *What the City Can Do to Reduce the Cost of Living*, 7; Miller, *Terminal Markets in the United States*.

34. New York City, Mayor’s Market Commission, *Report of the Mayor’s Market Commission of New York City*, 5–9.

35. Black, “Foreign Markets,” in New York City, Mayor’s Market Commission, *Report of the Mayor’s Market Commission of New York City*, 85–94; Black, *A Terminal Market System*, 21–23.

36. Paflik-Huber, “Covered Markets in Germany,” in Guàrdia and Oyón, *Making Cities through Market Halls*, 351–52; quote from Black, *A Terminal Market System*, 3–4.

37. “Proposed Bronx Market,” in New York City, Mayor’s Market Commission, *Report of the Mayor’s Market Commission of New York City*, 49–56.

38. “Wholesale Terminal Markets in New York,” 1034.

39. Miller, *What the City Can Do to Reduce the Cost of Living*, 2, 5.

40. Brand, “The Office of Markets,” in King, *Reducing the Cost of Food Distribution*, 252–59; quote on 259.

41. “Report of the Secretary of Agriculture,” in US President, *The Abridgment 1915*.

42. According to photographs taken by Branch, he visited the municipal markets of St. Louis on February 28, 1914. His field notes on the reverse of the Biddle Market photograph describe it as “a filthy place which needs repairs and clean-up in the worst way. An open farmers and hucksters open space a block up where most of the trade takes place. Enclosed building little used.” On the Soulard Market photograph, he noted: “Market in very poor shape and unsanitary condition. Only one stall rented in building. . . . Only place in city where many farmers come in to sell retail, great

opportunity to fix up space and make a good market." See photos in RG 83-G, Box 10, National Archives.

43. Civic League of St. Louis, *Public Markets in St. Louis*.

44. "How the Office of Markets and Rural Organization is Benefiting the Farmer and Country at Large," typescript, January 29, 1915, CMDP, Box 1, National Archives. This document also cites a similar undertaking by the truck growers in Providence, Rhode Island.

45. Wiser, comp., *Preliminary Inventory of the Records of the Bureau of Agricultural Economics (Record Group 83)*, 3. Among its regulatory functions, the office was responsible for enforcement of the US Cotton Futures Act.

46. "Report of the Secretary of Agriculture," in US President, *The Abridgment 1915*, 1474, 1480–90.

47. Brand was referring to the new eight-story Bieber Office Building at 1358 B Street near the corner of present-day Independence Avenue and Fourteenth Street SW. See USDA, AMA, "Where We Worked: A History of the Buildings of the US Department of Agriculture in the District of Columbia," by John C. White, typescript, October 1960, 9, National Agricultural Library.

48. USDA, *List of Workers in Subjects Pertaining to Agriculture*.

49. Branch, *Retail Public Markets*, in *Yearbook of the Department of Agriculture for 1914*, 173–83.

50. G. V. Branch, "A Practical Market System for Our Large Cities," typescript, ca. 1915, 3–6. In RG 83, Entry 11, Box 3, "Lectures and Conferences—Misc." folder, National Archives.

51. Branch, "A Practical Market System for Our Large Cities," 7–9.

52. Branch, "A Practical Market System for Our Large Cities," 11–12. For a thorough account of the merits of trolley freight service for produce, see King, *A Study of Trolley Light Freight Service*.

53. G. V. Branch, "Memorandum for Mr. Brand Regarding the Main Lines of Work Which It Is Hoped to Take Up under the Project, City Marketing Investigations," typescript, May 22, 1914. In RG 83, Entry 11, Box 1, National Archives.

54. G. V. Branch, "Review of the Recent Work of the City Marketing and Distribution Project," typescript, n.d. In RG 83, Entry 11, Box 1, National Archives.

55. Beanfield's blueprints and designs are in "Office Files of R. M. Beanfield, 1916–1917," RG 83, Entry 8, National Archives.

56. Public, No. 293 (63rd Congress) [H.R. 20415]; Public, No. 190 (64th Congress) [H.R. 12717]; Public, No. 390 (64th Congress) [H.R. 19359]; Public, No. 219 (65th Congress) [H.R. 12714]; Public, No. 22 (66th Congress) [H.R. 7413].

57. On the breadth of the bureau's photographic coverage of food marketing, organized by each state, see Magoon, *Photos at the Archives*.

58. On the history of reform photography, see Hales, *Silver Cities*.

59. Letter from Achsah Lippincott to George V. Branch, November 9, 1917, RG 83, Entry 11, Box 1, National Archives; Telegram from George V. Branch to Achsah Lippincott, November 14, 1917, RG 83, Entry 11, Box 1, National Archives; "Movie Man Shoots Market Crowd and Causes Sensation," *Lancaster, Pa. Intelligencer*, November 10, 1917.

60. George R. Goergens, *To Market! To Market!*, c. 1917 to 1924, twelve minutes, USDA video no. 33.79, National Archives, Motion Picture, Sound, and Video Branch. For a history of Cleveland's West Side Market, see Taxel and Suszko, *Cleveland's West Side Market*.

61. Brand, "Report of the Chief of the Bureau of Markets."

62. Sherman, *Merchandising Fruits and Vegetables*, 267–68.

63. Sherman, *Merchandising Fruits and Vegetables*, 458; "Providence Market News Service."

64. Brand, "Report of the Chief of the Bureau of Markets," 432–39.

65. Nourse, *The Chicago Produce Market*, 249.

66. Boston City Planning Board, *A Summary of the Market Situation in Boston*, 142–70. The Boston version contains revisions and new material added by William N. Seaver, also of the New York Municipal Reference Library; quote on 142.

67. Sullivan, *Markets for the People*, 274; quotes from 2, 13, 228. King, "Review of *Markets for the People: The Consumer's Part*, by J. W. Sullivan," 341–42.

68. Sullivan, *Markets for the People*, 301.

69. "Public Markets in New York," *National Provisioner*, September 5, 1914, 40.

70. "Street Markets in Europe," *National Provisioner*, September 5, 1914, 40; "Europe's Markets as Models for New York," *New York Times*, September 15, 1914. Kaufmann's tour ended with his arrest as a German spy in Holland, but he was released.

71. New York City, Board of Estimate and Apportionment, Committee on Markets, *Report on Market System for New York City and on Open Markets Established in Manhattan*. The report includes contributions from J. W. Sullivan, S. Walter Kaufmann, Hon. C. J. McCormack, Ogden L. Mills, and William Bondy, with their descriptions on market conditions in Paris, London, and Berlin. See also Sullivan, *Markets for the People*, 4–13.

72. Wentworth, "Public Markets," 1–6.

73. Henry B. Kniffke, "Municipal Markets in Dubuque, Iowa." A letter to Clyde L. King, July 18, 1912. Reprinted in Clyde Lyndon King, *A Study of Trolley Light Freight Service*, 53–56.

74. Talbot, "Kansas Municipal Notes." Mitchell's talk in Topeka was quoted at length in an editorial in Beaumont, Texas. See the *Beaumont Journal*, July 14, 1912, 4; "How Des Moines Solved the High Cost of Living."

75. "Women Buy from Farmers. Meet Them at the Wharf in Pittsburgh—Hucksters Suffer," *New York Times*, June 17, 1912.

76. Chicago Municipal Markets Commission, *Preliminary Report to the Mayor and Aldermen of the City of Chicago by the Chicago Municipal Markets Commission*, 39–41.

77. US Bureau of the Census, *Municipal Markets in Cities Having a Population of over 30,000*, 14–15, 24.

78. Frank, "Housewives, Socialists, and the Politics of Food."

79. Frieburger, "War, Prosperity, and Hunger."

80. Day, "New York Market Department Reorganized."

81. "No Remedy at Law for Rising Costs," *New York Times*, February 3, 1917; McElheny, *Analysis of the Joint Report on Foods and Markets of Governor Whitman's Market Commission and Others . . .*, 12–15.

82. “New York Citizens Urge Terminal Markets to Reduce Living Costs,” *New York Herald*, January 15, 1920.

83. *Bush Terminal Company (Bush Terminal)*, Historic American Engineering Record, Library of Congress, Prints and Photographs Division, *HAER Survey No. NY-201*; Gallagher, “Bush Terminal,” 171.

84. Porter, “National Economic Problems”; Porter, “Problems of Food Distribution.”

85. “Excavating for Foundations of Union Terminal Warehouse,” *Los Angeles Times*, February 11, 1917.

86. “Largest Market, Covering Eighteen Acres, Soon to be Completed in Los Angeles,” *Los Angeles Times*, January 1, 1910; “Rushing Work on Terminal,” *Los Angeles Times*, November 18, 1917.

87. “Great Terminal Market Opened to the Public,” *Los Angeles Times*, May 12, 1918.

88. Longstreth, *The Drive-in, the Supermarket, and the Transformation of Commercial Space in Los Angeles, 1914–1941*, 142–44, 215n25; “The New Wholesale and Shipping Center of Los Angeles,” *Los Angeles Times*, May 5, 1918.

89. “Bringing the Railways and Its Freight Customer Together.”

90. Waterbury, “Market and Warehouses Form Large Building Group”; Rathbun, “The Los Angeles Wholesale Terminal Market”; “How Los Angeles Handles Its Wholesale Produce Market.”

91. “Great Terminal Market Opened to the Public,” *Los Angeles Times*, May 12, 1918.

92. Hegel, “The Los Angeles Produce Terminal”; “Food Business Third in City’s Retail Trade,” *Los Angeles Times*, July 12, 1931; “Produce Industry Reaches Vast Proportions Here,” *Los Angeles Times*, August 7, 1932; Hise, “Nature’s Workshop,” 78–80.

93. Winerman and Kovacic, “Outpost Years for a Start-Up Agency,” 156–58; US Federal Trade Commission, *Food Investigation*, 235–49.

94. US Federal Trade Commission, *Food Investigation*, 124, 205–7, 233, 249.

95. US Federal Trade Commission, *Food Investigation*, 185–95.

96. US Federal Trade Commission, *Food Investigation*, 88, 192–94. The FTC took a similar, highly regulatory approach in its summary report of the meatpacking industry (1919), which led to Justice Department litigation and a public confrontation between the FTC and the department. See Winerman and Kovacic, “Outpost Years for a Start-Up Agency,” 223–24.

97. US Federal Trade Commission, *Food Investigation*, 21; McDean, “Professionalism, Policy, and Farm Economics in the Early Bureau of Agricultural Economics”; Taylor, *A Farm Economist in Washington, 1919–1925*; Tenny, “The Bureau of Agricultural Economics.”

98. “National League Offices Moved to Washington,” *Chicago Packer*, May 1, 1920; National League of Commission Merchants of the United States, *Twenty-Eighth Annual Convention of the National League of Commission Merchants of the United States*, 16. Among its many lobbying efforts, the league was engaged in lobbying Congress for package standardization in the 1920s. See French, “Urges Package Standardization.”

Chapter 4 • The Nation's Capital

1. "City Plans to Cut High Cost of Living: New Markets Commissioner Tells How the Middleman May Be Eliminated by Central Agency," *The Sun* (NY), March 17, 1918; "Mayor is Opposed to Food Survey," *Evening Public Ledger* (Philadelphia), March 23, 1921; "Chicago's New Produce Market," *Chicago Eagle*, June 5, 1920.

2. "City Markets [Bureau] Helps Lower Food Costs," *Beaver Herald* (Beaver, OK), July 15, 1920.

3. Tangires, "Contested Space," 47–48.

4. District of Columbia, *Laws of the Corporation of the City of Washington, Passed by the Fifty-Fourth Council*, 31–32; District of Columbia, *Laws of the Corporation of the City of Washington, Passed by the Sixty-Third Council*, 7.

5. US Senate Committee on Public Buildings and Grounds, *A Bill to Incorporate the Washington Market Company*; US Congress, *An Act to Incorporate the Washington Market Company*.

6. Tangires, "Adolf Cluss and Public Market Reform," in Mauch and Lessoff, *Adolf Cluss, Architect*.

7. Washington Market Company, *A Statement on Behalf of the Company*, 21, 26–27.

8. John Clagett Proctor, "Old Mart Flourished on Site of New Justice Home," *Washington Star*, August 2, 1936; "P. K. Chaconas & Co., Inc.," *Washington Times*, November 8, 1906.

9. US House Committee on the District of Columbia, *Farmers' Market Site*, 534.

10. "A Big Building Idea: Western Beef Firms to Erect a Large Storage House," *Washington Post*, February 2, 1895.

11. "The Abattoir at Benning, D.C., Where Washington-Dressed Beeves Are Slaughtered," *Washington Times*, June 24, 1906; "Business Men Inspect Washington's Abattoir," *Washington Post*, June 24, 1906; "Armour and Company Invite You to See How They Handle Meats," *Alexandria Gazette*, September 19, 1910.

12. "Buys Business Site: Swift & Co. to Move to West Eckington," *Washington Herald*, November 10, 1907; "$400,000 Packing Branch to Open," *Washington Post*, November 14, 1920.

13. US Senate Committee on the District of Columbia, Moore, ed., *Report of the Senate Park Commission*, 70–71; quote on 70. For a current reading of the 1901 McMillan Plan, see Kohler and Scott, eds., *Designing the Nation's Capital*.

14. Scott, "'A City Designed as a Work of Art,'" in Kolher and Scott, *Designing the Nation's Capital*, 30.

15. "Center Market Leaders Association Invites You to Lower the Cost of Living," *Washington Times*, October 23, 1914; "Food Exposition at Center Market is Formally Opened," *Washington Times*, February 15, 1915.

16. USDA, BAE, *Report of Chief of Bureau of Agricultural Economics* (1923), 45–48; US Senate Committee on Manufactures, *Report of Committee and Hearings Held Before the Committee on Manufactures Relative to Foods Held in Cold Storage*, 80–81.

17. Letters from McF. Kerbey, Acting in Charge, City Marketing and Distribution Project, USDA, Bureau of Markets, to Tunstall and Arrington, Norfolk, VA, May 3, 1920, and May 11, 1920. In City Marketing and Distribution Project, BAE, RG 83, Entry 11, Box 1, National Archives.

18. District of Columbia, *Annual Report of the Commissioners of the District of Columbia* (1908), 245.

19. District of Columbia, *Annual Report of the Commissioners of the District of Columbia* (1907), 265; "Helping the Farmer Help Us," *Washington Times*, August 16, 1914; "National Museum Becoming Reality," *Washington Times*, August 27, 1905. The National Museum refers to the Smithsonian National Museum of Natural History.

20. "District Fish Market Plans Are Completed," *Washington Times*, November 1, 1913; "Siddons and Haskell Give Three Reasons for Demanding Municipal Fish Wharves and Market for the District," *Washington Times*, March 22, 1914; "Markets Director Collapses Quickly," *Washington Times*, May 5, 1914.

21. "Former Star Athlete and Cadet Captain to Study Problems of City Markets," *Washington Times*, June 16, 1914; "Plan New Market at City Fish Wharf: Commissioners Will Ask Congress to Help Cut Cost of Living," *Washington Times*, August 14, 1914; "Community Buying Finds Favor Here," *Washington Times*, August 20, 1914, 1; "Plans New Market System in Capital," *Washington Times*, August 22, 1914.

22. "Would Save City Million or More with a New Market," *Washington Times*, December 15, 1914.

23. US Congress, *District of Columbia Appropriation Bill, 1917*; Ross, "A History of Washington's Fish Market, 1865–1989," 68–79.

24. "City Markets Give H.C.L. Body Blow," *Washington Times*, May 3, 1919.

25. Moore, "Problems in the Development of Washington," 216; US Commission of Fine Arts, *Annual Report*, 16; quote on 12.

26. "Dealers Want Produce Plant: Suggestion of Scalco to Beat H. C. L. by Municipal Building Pleases Senate Investigation," *Washington Herald*, February 16, 1920.

27. Elizabeth Lattimer, "Saving Money in the Home; Little Tricks for Women in Household Economics," *Washington Times*, May 13, 1920.

28. US Congress, *An Act to Repeal . . . the Charter and Lease Granted . . . to the Washington Market Company*; "Plan Changes in Big Market: Survey of Conditions at Center Mart Being Made by Department Specialists," *Washington Times*, April 7, 1921.

29. Baker and Rasmussen, "Economic Research in the Department of Agriculture," 54.

30. 1922 Calendar. In Henry C. Taylor (1873–1969) Papers, 1896–1967, Box 50, Folder 13, State Historical Society of Wisconsin.

31. Baker and Rasmussen, "Economic Research in the Department of Agriculture," 53–55.

32. USDA, BAE, *Report of Chief of Bureau of Agricultural Economics* (1923), 45–48; "Invents New Refrigerating Process: J. F. Barghausen, Senior Investigator in Agricultural Technology in the Department of Agriculture, Evolves Method of Displaying Meats and Other Foodstuffs under Glass in Manner to Keep Them Perfectly Fresh and at the Same Time Sanitary—Device Installed as Experiment at Center Market," *Washington Post*, September 6, 1925.

33. Arthur E. Goodwin, "Modernizing Need of Central Market, Seattle Man Says. Asks Why Government Institution is Not Made Model for the Country," *Washington Post*, March 22, 1925; Goodwin, *Markets*, 144–46, 282–85.

34. The National Capital Park Commission was established in 1924, redesignated the National Capital Park and Planning Commission in 1926, and superseded by the National Capital Planning Commission in 1952.

35. USDA, BAE, *Report of Chief of Bureau of Agricultural Economics* (1926), 39–40; "Washington Market Case Finally Settled," *Washington Post*, May 27, 1924; "Disposal of Center Market Site Held within US Rights," *Washington Star*, September 5, 1926.

36. "Commission Men to Sway Decision on Market Site: Planning Board Subcommittee Would Not Move Farmers Until Merchants Plan Their Change; Holds Removal of Center Stall Inadvisable," *Washington Post*, October 16, 1926.

37. Proposal from R. D. Marshall [Comptroller, Washington Market Company], to Maj. Carey H. Brown [NCPPC], September 13, 1926. In RG 328, Entry 7, Box 97, National Archives.

38. "Market Facilities Cited to Planners by B. & O. Officials: Patterson and Eckington Tract Held Advantageous for Purpose. Committee Declares No Decision Made Yet," *Washington Post*, July 28, 1926; Letter from Percival Hall [President, Columbia Institution for the Deaf and Dumb], to the NCPPC, August 24, 1926. In RG 328, Entry 7, Box 98, National Archives.

39. Southwest Business Men's Association, *Advantages of the Water Front Area for a Market Center*; "Water Front Held as Best Location for Farm Market," *Washington Post*, July 30, 1926.

40. See "Market Propaganda 1924–1928," Folder #545-70-50. In RG 328, Entry 7, General Records, Planning Files, 1924–1967, Box 98, National Archives. The market site issue was featured on the Post radio hour broadcast on WRC, August 23, 1926, from 6:00 to 7:00 p.m. See "Market Site in Southwest Holds Its Lead in Post Poll," *Washington Post*, August 23, 1926.

41. "Site Has Long Lead as Post Poll Ends," *Washington Post*, August 29, 1926; "Midcity's Campaign Begun for Market in Central Section," *Washington Post*, August 14, 1926; "Center Stand Men Urge Midcity Site for Union Market," *Washington Post*, September 28, 1926.

42. "Bell Finds Center and Farm Markets Are Little Related," *Washington Post*, September 5, 1926.

43. Quoted in Walton, "The 1901 McMillan Commission: Beaux Arts Plan for the Nation's Capital," 102–3. Jardine was still acting secretary of agriculture at the time he wrote this letter to Charles Moore.

44. "Jardine Approves Market Site for Commerce Office," *Evening Star*, September 17, 1926. The site was at this time under consideration for the Department of Commerce Building.

45. Memorandum from C. W. Kitchen [Acting Chief, USDA Bureau of Agricultural Economic], to Dr. Woods [*sic*], September 24, 1926. In Records Relating to the Operation of Center Market, 1921–1930, RG 83, Entry 30, Box 2, National Archives. The BAE's Division of Agricultural Technology was also in the midst of testing its refrigerated market stalls at Center Market. See "Invents New Refrigerating Process," *Washington Post*, September 6, 1925.

46. Memorandum from C. W. Kitchen to Dr. Woods, September 24, 1926. In Records Relating to the Operation of Center Market, 1921–1930, BAE, RG 83, Entry 30, Box 2, National Archives.

47. Letter from Charles F. Marvin, Acting Secretary of Agriculture, to Charles Moore, June 4, 1927, in "District of Columbia, Markets," RG 66, Project Files, 1910–1952, National Archives.

48. Bailey, comp., *RUS*, 445; "Necrology"; Tenny, *Development and Growth of Standardization of Farm Products*. Tenny assumed an executive position with the Associated California Fruit Industries, Inc. after resigning from the BAE on July 16, 1928.

49. "Center Market to be Torn Down in January," *Washington Star*, October 26, 1930; "102 Center Market Dealers Move to New Business Stands," *Washington Star*, January 4, 1931; "Center Market Passes into History," *Washington Post*, January 4, 1931; "Mart Closing Hits Farmers in State," *Baltimore Sun*, January 1, 1931.

50. Fred J. Rice, "Center Market is Seen Superfluous for Capital," *Washington Post*, February 20, 1930.

51. Longstreth, *The Drive-in, the Supermarket, and the Transformation of Commercial Space in Los Angeles, 1914–1941*, 148–50; Peatross, ed., *Capital Drawings*, 37.

52. Rice, "Center Market is Seen Superfluous for Capital."

53. "Planning Program, Covering 30 Years, Agreed on for City," *Washington Post*, August 22, 1926; "Great Strides Seen for Regional Plan by Year from Now," *Washington Post*, November 21, 1926; Letter from Harland Bartholomew to Major Carey H. Brown, October 26, 1926, Memorandum from William D. Hudson to Major Carey H. Brown, December 26, 1926, and Letter from William D. Hudson to Major Carey H. Brown, January 8, 1927, all in RG 328, Entry 7, General Records, Planning Files, 1924–1967, Box 97, National Archives. The forthcoming thirty-year plan for Washington announced in the 1927 newspaper accounts was never adopted, although Harland Bartholomew's 1927 transit and traffic reports for Washington can be found in the Harland Bartholomew and Associates Collection, Washington University Libraries. The city did not adopt its first comprehensive plan until 1950.

54. "Pennsylvania Railroad Opens World's Largest Produce Terminal in New York."

55. "New Warehouse to Cost $1,000,000," *Washington Post*, November 5, 1922; "Old Company to Start Refrigerating Concern," *Washington Post*, July 23, 1927; US House Committee on the District of Columbia, *Farmers' Market Site*, 48–50. The historic warehouse was rehabilitated in 1980 and housed the Washington Design Center. It was adapted once again and opened as the Museum of the Bible in November 2017.

56. George M. Roberts, "Description of the Farmers' Produce Market," typescript, ca. 1926, in RG 328, Entry 7, General Records, Planning Files, 1924–1967, Box 97, National Archives; US House Committee on the District of Columbia, *Farmers' Produce Market in the District of Columbia*.

57. "District May Fail to Obtain Congress Action on Market," *Washington Post*, February 3, 1927; "Contractors Start Excavating on Site of Revenue Office," *Washington Post*, March 22, 1927; "Farm Market Hearing Scheduled Tomorrow," *Washington Post*, October 4, 1927; "Condemnation Soon of Sites US Wants for 3 Structures," *Washington Post*, October 16, 1927; "Mellon Has Power to Permit Market to Locate on Mall," *Washington Post*, December 17, 1927; "Farmers' Market Sheds to be Demolished in

Part," *Washington Post*, January 14, 1928; "Farm Mart Location on B Street Approved," *Washington Post*, March 23, 1928.

58. "Big Development of Farmer Market Area is Underway," *Washington Post*, July 17, 1928.

59. "Railroads Battle over Selection of New Market Site: Hot Rivalry of Pennsylvania and B. & O.," *Washington Post*, October 6, 1927.

60. "Market Will Open with Gala Festival," *Washington Post*, February 12, 1931; "25,000 Celebrate Formal Opening of Wholesale Market," *Washington Post*, February 13, 1931; "20,000 Attend Opening of New Market," *Washington Star*, February 13, 1931; "Packers' Building Work is Started," *Washington Post*, March 27, 1930.

61. "20,000 Attend Opening of New Market."

62. "Big Development of Farmer Market Area is Underway"; "The Wholesale Market," *Washington Post*, July 18, 1928; "Potomac Freight Terminal Plan Will be Speeded," *Washington Post*, July 22, 1928; "New Water Street Market is Started," *Washington Post*, November 9, 1928; "The Southwest Market," *Washington Post*, November 10, 1928.

63. "Site on Water Street Recommended for Farmers' Market," *Washington Star*, January 12, 1931.

64. "Wholesale Market Deal is Completed," *Washington Post*, October 9, 1931; "$28,680 is Low Bid for Market Sheds," *Washington Post*, December 30, 1931; "10th and F Street Market Sheds Completed," *Washington Star*, May 17, 1932; "Farmers' Market Rules Are Drafted," *Washington Post*, May 18, 1932; "Farmer's Market, 10th and E, Opens Tomorrow, Free Parking," *Washington Star*, May 22, 1932.

65. Mrs. W. B. Doak, "Comfortable and Attractive Southwest Market is Asked," *Washington Post*, September 11, 1932.

66. W. B. Doak, "Capital Described as Mean Market for Farm Products," *Washington Post*, September 4, 1932.

67. "Scale Check Stops Loss to Coal Users," *Washington Post*, October 5, 1932.

68. Crook, "The Montgomery Farm Women's Cooperative Market"; Tanner, *The Entrepreneurial Characteristics of Farm Women*, 125, 160; Coleman, *Mama Wears Two Aprons*, 43–71.

69. Tangires, *Public Markets*, 29, 188–89.

70. Ross, "A History of Washington's Fish Market," 98–100.

71. On the fate of the Southwest Market Center, see Longstreth, "Brave New World," in *Housing Washington*; Ammon, "Commemoration Amid Criticism." The Maine Avenue Fish Market barely survived urban renewal and has once again entered a new chapter in its long history. The District of Columbia Redevelopment Land Agency turned the property over to a developer that has incorporated the fish market into a "gateway" for The Wharf—a massive mixed-use waterfront project. See Jonathan O'Connell, "Owners of Maine Avenue Fish Market Sue over SW Waterfront Development," *Washington Post*, August 13, 2015.

72. US House Committee on the District of Columbia, *Farmers' Market Site*, 21, 91–97. The plat in possession of Symons was probably for Detroit's Eastern Market, the cruciform structure designed by George V. Branch, director of the Detroit Bureau of Markets. Market directors from other large cities visited Detroit's Eastern Market

to study its design and operation as a model. See "Branch, '12, Designs New Market Plans"; "Detroit's New Market Building."

73. "Railroads Battle over Selection of New Market Site: Hot Rivalry of Pennsylvania and B. & O.," *Washington Post*, October 6, 1927.

74. US House Committee on the District of Columbia, *Farmers' Market Site*, 84, 114.

75. "Site of New Justice Building Undecided: Archives Structure May Be Erected on Land for Triangle Unit. Mellon is Consulted," *Washington Post*, March 29, 1930; "Hoover Urges Funds for Six New Buildings," *Washington Post*, April 23, 1930; "$3,336,029 is Value Set on Justice Site," *Washington Post*, January 24, 1931.

76. "Merchants Ready to Buy Patterson Market Site," *Washington Post*, February 8, 1928; "Patterson Tract Lots Bought by Market Men," *Washington Post*, July 29, 1928; "Patterson Tract Building to Begin in about 60 Days, *Washington Post*, August 12, 1928.

77. "New Market Here is Now Tenanted," *Washington Star*, September 20, 1930; "New Union Market to Open Tomorrow," *Washington Post*, February 15, 1931.

78. "Business Site Sales Made during Week," *Washington Post*, August 2, 1931; "Leases Reported in Union Market," *Washington Post*, August 9, 1931.

79. "New Union Market to Open Tomorrow"; "Extension Planned for Union Market," *Washington Star*, July 11, 1931.

80. Display ads, *Washington Post*, May 31, 1935, and September 13, 1935. A complicated ownership prevailed (68 owners controlling 120 lots), when the DC Office of Planning considered its redevelopment in 2007. While property disputes, neighborhood activism, and historic preservation studies stalled grand development plans, the Union Market Terminal was designated a DC historic landmark district. EDENS, a South Carolina–based development company, owns large portions of the property and is promoting the site as an artisanal marketplace. See EHT Traceries, Inc. for the District of Columbia Office of Planning, *Florida Avenue Market Study*; Washington, DC, Office of Planning, *Florida Avenue Market Study, Small Area Plan, Volume I*; Branum, "Union Market."

81. "Chicago's Market Center Will Move," *Washington Post*, May 14, 1922.

82. Deupree, *The Wholesale Marketing of Fruits and Vegetables in Baltimore*, 117n4.

83. "New Terminals Are Opened in Washington, DC," *Chicago Packer*, February 21, 1931.

Chapter 5 • The New Deal

1. USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1935), 1. For more on research in agricultural marketing and economics at the USDA during the New Deal, see Larson and Zimmerman, *Sociology in Government*, 1–43; Baker and Rasmussen, "Economic Research in the Department of Agriculture," 56–58.

2. Hedden, *Produce Terminal Requirements in the New York Area*, 7. For more on Hedden's career at the Port of New York Authority, see Doig, *Empire on the Hudson*.

3. Abel, "Frederick V. Waugh, a Profile of Relevance," 44; Houck, "Sound Judgment and Common Sense"; Houck and Abel, eds., *Selected Writings on Agricultural Policy and Economic Analysis by Frederick V. Waugh*; King, "Review of Selected

Writings on Agricultural Policy and Economic Analysis by Frederick V. Waugh"; Runge, "Agricultural Economics," 7. On Waugh's tenure as chief of the division, see Wiser, *Preliminary Inventory of the Records of the Bureau of Agricultural Economics*, 14.

4. USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1935), 23–24; USDA, *List of Technical Workers in the Department of Agriculture* (1935), 25–26; "Where Facts Come First."

5. USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1935), 15. In 1933, the BAE closed its offices in Australia and South Africa, and reduced staff in Buenos Aires, Belgrade, and Marseilles. See USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1933), 5.

6. "Location of Workers of the Bureau of Agricultural Economic, USDA, January 1936," map reproduced in Wernimont, "The Bureau of Agricultural Economics as a Functional Unit of the Federal Government," fig. 3.

7. Malcolm Rutherford, "The USDA Graduate School: Government Training in Statistics and Economics, 1921–1945," Department of Economics, University of Victoria, typescript, January 2010, esp. 1–29.

8. USDA, BAE, *Bibliography on the Marketing of Agricultural Products*; "Caroline B. Sherman," in Biographical Sketches, USDA History Collection, IX.3, National Agricultural Library, Special Collections; USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1935), 12, 26–27. For a thorough description of the Division of Information and its breadth of scope in its early years, see USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1925), 52–56.

9. USDA, *List of Workers in Subjects Pertaining to Agriculture*, 33; USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1935), 12–13, 32; Wernimont, "The Bureau of Agricultural Economics as a Functional Unit of the Federal Government," 42. Wells was the son of Henry Clapp Sherman, the distinguished professor of chemistry at Columbia. See King, *Henry Clapp Sherman 1875–1955*, 397–405.

10. Shockley, *Gansevoort Market Historic District*, 266; James O'Donnell Bennett, "Chicago's Food—A Drama of City Nights: Truck Caravans and Trains Rush in the Supplies," *Chicago Daily Tribune*, October 4, 1931; Rathbun, "The Los Angeles Wholesale Terminal Market."

11. *B.A.E. News* 40, no. 3 (February 1, 1939): 4; *B.A.E. News* 40, no. 8 (April 15, 1939): 1.

12. USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1937), 21.

13. Sherman, "The Wholesale Produce Market."

14. Conley, "New Market District and Food Terminal Will Reduce Congestion and Facilitate Handling Perishable Foods," 93–94; Watson, "Cleveland's Cooperative Food Terminal."

15. Sherman, "The Wholesale Produce Market," 200–202.

16. Hedden, *How Great Cities Are Fed*, 274; "Pennsylvania Railroad Opens World's Largest Produce Terminal in New York"; "Pennsylvania Railroad."

17. G. V. Branch, Director, Bureau of Markets, Detroit, "Detroit's New Union Produce Terminal," paper given before the tenth annual convention of the National

Association of Marketing Officials at the Congress Hotel, Chicago, on December 3, 1928; Henshaw, *Produce Terminals and the Cost of Living*.

18. "Terminal Opening Celebration Ends," *Buffalo News*, March 17, 1931; "Deep Silence Replaces Elk Street Mart's Din," *Buffalo Times*, March 17, 1931; "Erie and Nickel Plate Develop Large Produce Terminal at Buffalo, N.Y."; "Niagara Frontier Food Terminal in Buffalo, New York." Quote from "Old Elk Street Market May Soon Be Wiped Out," *Buffalo Courier*, January 16, 1930.

19. Crouch, *The Public Markets of Buffalo, N.Y. (1927)*; Crouch, "New Regional Market Dedicated at Buffalo, N.Y."

20. Sherman, "The Wholesale Produce Market," 200–202.

21. $17,000,000 Market Will Feed Chicagoans," *Washington Post*, August 23, 1925.

22. *South Water Street Market Must Go*, 7–8.

23. Arthur D. Cloud, "They Want to Take South Water with Them," *Chicago Daily Tribune*," January 5, 1925; Goodwin, *Markets*, 132–33.

24. S. W. Straus & Company, *Chicago Produce District First Mortgage 6% Bonds*, 1.

25. "Funeral Today for S. W. Straus, Banker, Philanthropist," *Jewish Daily Bulletin*, September 9, 1930, 4.

26. S. W. Straus & Company, *Chicago Produce District First Mortgage 6% Bonds*, 1–9. For current readings on the Wacker Drive project and its displacement of the South Water Street Market, see Draper, "Planning Wacker Drive," in Celik, Favro, and Ingersole, *Streets*; Finstein, "Lofty Visions," 175–204; and Kling, "Wide Boulevards, Narrow Visions."

27. "The South Water Street Market," April 20, 1938, typescript, Chicago Public Library.

28. S. W. Straus & Company, *Chicago Produce District First Mortgage 6% Bonds*, 10.

29. My reading of this image was informed by Ross, "Picturing the Profession." A digital image of the South Water Market design by Fugard & Knapp, ca. 1925, is available online at the website of the Ryerson and Burnham Archives, Art Institute of Chicago. See http://digital-libraries.saic.edu/cdm/singleitem/collection/mqc/id/12644/rec/1 (accessed May 5, 2018).

30. Cloud, "They Want to Take South Water with Them." The phrase "Spotless Town" was coined by an advertising campaign for Sapolio scouring cleanser and had become a popular synonym for cleanliness, order, and perfection. See Strasser, *Satisfaction Guaranteed*, 134–35.

31. "Feeding a City of Three Million People," 75; Charles B. Ball, "'What of the City,' Chicago," 12–18; "Opens Product [*sic*] Market," *Chicago Defender*, September 24, 1927.

32. Bennett, "Chicago's Food—A Drama of City Nights."

33. Sherman, "The Wholesale Produce Market," 200–203.

34. Sherman, "The Wholesale Produce Market," 200–203; "Plan for New Public Market is Announced," *Albany Evening News*, January 10, 1933; "At the Regional Market in Menands, Early Risers Buy Produce," *Schenectady Gazette*, November 26, 1981; "New York Terminal Market Described by Harry E. Crouch: State Agriculture Authority Tells of Niagara Frontier Food Terminal and Capitol Districts Cooperative," *Chicago Packer*, February 20, 1937.

35. USDA, BAE, *The Marketing and Distribution of Fruits and Vegetables by Motor Truck*, 76–78; USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1935), 23.

36. Hamilton, *Trucking Country*, 44–68; "A Fine Program for Marketing Officials' Meet," *Chicago Packer*, December 7, 1935.

37. New Jersey State College of Agriculture and Pennsylvania State College, *The Philadelphia Wholesale Fruit and Vegetable Market*, 16.

38. Warren, *Regional Market Needs in New York State*, 3, 11–12; "Public Markets as a Problem of the Farmer and His City Cousin"; Childs, *Trucking and the Public Interest*, 20–30. Roosevelt's report on decentralized markets for the State of New York also prompted private planning initiatives, such as roadside markets and farm women's markets, that eliminated the middleman, shortened or eliminated hauling distance, and brought locally sourced farm produce to the mobile consumer. For an interesting but short-lived collaboration between Walter V. Davidson of Buffalo, New York, and Frank Lloyd Wright on the idea of "wayside markets," see Kinchin, "Little Farms Unit."

39. Warren, *Regional Market Needs in New York State*, 16–21; Weaver, *A Survey of Some Public Produce Markets in Up-State New York*, 92–101. For more on the model market sheds in Detroit, see "Branch, '12, Designs New Market Plans"; "Detroit's New Market Building."

40. Sherman, "The Wholesale Produce Market," 203; Crouch, *The Public Markets of Buffalo, N.Y. (1927)*; Crouch, "Developing a New Type of City Market."

41. Crouch and McNeil, *Market Facilities of the Central Hudson District with a Plan for Improving Such Facilities*; New York State, Department of Agriculture and Markets, *Annual Report for the Year 1934*.

42. Crouch, *A Report Setting Forth the Marketing Practices and Market Needs of the Lower Hudson Regional Market District, Together with Plans Proposed by the Authority for a Regional Market at Newburgh and a Local Market at Poughkeepsie*. The Newburgh market was demolished in 1990. See Ruth Valenti, "The Way It Was: Demise of Regional Market Building Recalls Past History," *Evening News* [Newburgh, NY], April 22, 1990.

43. Edwards, *A Regional Market for Connecticut*, 10.

44. USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1938), 35; USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1940), 43; "Atlanta to Have a New Produce Terminal Market," *Chicago Packer*, June 18, 1938.

45. "New Plants to be Built in Florida," *Chicago Packer*, August 4, 1934; "First of Five Florida Farmers' Markets to be Dedicated December 18," *Chicago Packer*, December 15, 1934; "Sanford, Fla., Farmers' Market Is Being Enlarged," *Chicago Packer*, December 5, 1936; "New State Farmers Market at Plant City is Formally Opened," *Chicago Packer*, March 11, 1939.

46. Florida, Department of Agriculture, *The State Farmers' Markets of Florida, Their Purpose and Aim*; Florida, Department of Agriculture, *Florida State Farmers' Markets*.

47. "New York Street Notes," *Chicago Packer*, October 8, 1938.

48. *B.A.E. News* 40, no. 9 (May 1, 1939): 11; "Watermelon Control Committee Selected," *Chicago Packer*, April 22, 1939; "First Watermelon Control Committee Meeting Held," *Chicago Packer*, May 6, 1939.

49. Rasmussen, "The Motor Truck in Relation to Fruit and Vegetable Marketing," 384.

50. Williams, *City of Ambition*, 132, 429n56.

51. "Riding a Cabbage Back to the Farm."

52. One exception to the negative publicity was the favorable account of Paul Busch, a council member for the City of Berlin who visited the Bronx Terminal Market on July 26, 1929. Busch was emphatic that after completing his two-month tour of markets in the large cities of the United States, he would take back to Berlin a copy of the complete details of the Bronx Terminal Market in order to duplicate the project there. See Letter from Thomas F. Dwyer, [NYC Commissioner of Markets], to Mayor Walker, September 4, 1929. In New York City, Office of the Mayor, James J. Walker Administration, Departmental Correspondence Received, Microfilm Roll 52, Municipal Archives of the City of New York.

53. "Long Delay is Forecast in Opening of Bronx Market and Storage Plant," *Herald Tribune*, June 8, 1925; "Bronx Market Lacks Terminals and Buyers," *Herald Tribune*, December 3, 1926; "Waste of Millions May Force City to Sell Bronx Market at Loss," *Herald Tribune*, November 21, 1927; "A Look at Empty Bronx Market, Tomb of Costly Hylan Era," *Brooklyn Daily Eagle*, September 18, 1932.

54. See handwritten notes on First Floor Plan, Bronx Terminal Market, Drawing #M815, May 11, 1934. In Department of Ports and Trade, Market Drawings, Folder MK14, Municipal Archives of the City of New York.

55. "Morgan Tells Plans for 'Real' Bronx Market," *Herald Tribune*, January 21, 1934; "Big Bronx Market to Be Busy at Last," *New York Times*, April 23, 1935; "Gangsters Warned as Market Opens," *New York Times*, April 28, 1935; "A New Market Hums," *New York Times*, September 8, 1935.

56. These statistics were recorded on the back of the photograph in RG 69-N, Records of the Work Projects Administration, General Subject Series, 1933–1944, Box 31 (Neg. 21489-C; WPA Project No. 65-97-44).

57. Horr, "The Bronx Terminal Market." See also "Portland Public Market."

58. "Carl W. Kimball Tells of Success of Bronx Terminal Market," *Chicago Packer*, November 21, 1936. For a thorough account of the historical and architectural evolution of the Bronx Terminal Market, see Historic American Buildings Survey (HABS), "Documentation of the Bronx Terminal Market." See also Tangires, *Public Markets* (2008), 271–73. The city gave a ninety-nine-year lease on the site to a developer, who cleared it in 2006 (with the exception of the flagship building at East 149th Street, Exterior Street, and River Avenue) to make way for a shopping center. See Wikipedia s.v. "Bronx Terminal Market," accessed August 21, 2016, http://en.wikipedia.org/w/index.php?title=Bronx_Terminal_Market&oldid=617119801.

59. "Morgan Tells Plans for 'Real' Bronx Market;" New York City, Department of Public Markets, Weights and Measure, "Annual Report," 2–5.

60. New York City, Department of Public Markets, Weights and Measure, "Annual Report," 18; William Fellowes Morgan Jr., Department of Public Markets, Weights and Measures, report in La Guardia, *New York Advancing*; "City Accepts Shed in Bronx Terminal: New $250,000 Structure, Built by WPA, Expected to Cut Food Prices in Neighborhood," *New York Times*, May 3, 1939. On the Washington Market rehabilitation, see Tangires, *Public Markets* (2008), 257; on the First Avenue Retail

Market and the Thirteenth Avenue Retail Market, see Tangires, *Public Markets* (2008), 227–29. See also Wasserman, "Markets," in Jackson, *The Encyclopedia of New York City*.

61. Williams, *City of Ambition*, 194.

62. "Fulton Market Unit Opens on Monday," *New York Times*, June 17, 1939; "Mayor Criticizes 'Plow-Under' Plan," *New York Times*, June 20, 1939; Municipal Art Society of New York, "Fulton Fish Market," 10–13.

63. "Plans for Big Terminal in New York City," *Chicago Packer*, August 27, 1938; "No Definite Plans on New York Terminal: New York Department of Markets Has No Idea of 'Running Wild' on Washington Market Area Development," *Chicago Packer*, September 24, 1938.

64. Crow, Calhoun, and Park, *A Special Report*, iv, 6–17.

65. Crow, Calhoun, and Park, *A Special Report*, 96–102.

66. Crow, Calhoun, and Park, *A Special Report*, 11, 103.

67. Madigan-Hyland, *Preliminary Studies for a Fresh Fruit and Vegetable Wholesale Produce Market, New York City*.

68. Williams, *City of Ambition*, 179. For more on the role of the WPA in the modernization of Washington Market, see "Old Market House Gets New Façade," *New York Times*, October 27, 1940; "WPA Begins 'Facelifting' of Washington Market," *New York Times*, February 6, 1941; "A Landmark Has Its Face Lifted," *New York Times*, July 12, 1941; and "1,000 at Exercises Opening Market, *New York Times*, July 22, 1941.

69. "Ask Federal Loan for New Market in Philadelphia," *Chicago Packer*, February 3, 1934.

70. "Philadelphia Trade is Solidly against Proposed Terminal," *Chicago Packer*, February 10, 1934; "Protests against Proposed Terminal in Philadelphia," *Chicago Packer*, February 24, 1934.

71. "New York and Philadelphia Trade to Co-operate under Individual Regional Codes," *Chicago Packer*, March 31, 1934; "Trade Problems at Philadelphia Discussed," *Chicago Packer*, April 28, 1934.

72. Williams, *City of Ambition*, 179; quote from O'Neil, "Philadelphia," in Allen, *Our Fair City*, 67.

73. New Jersey State College of Agriculture and Pennsylvania State College, *The Philadelphia Wholesale Fruit and Vegetable Market*. Interested consumers could request copies of the 1936 Philadelphia report from the USDA, BAE. See "Nubbins." For more on the Philadelphia market, see "The Philadelphia Market Tied Up 5 Days by Strike," *Chicago Packer*, December 7, 1935; "Officials Confer with Philadelphia Trade on Current Market Problems," *Chicago Packer*, November 13, 1937.

74. New Jersey State College of Agriculture and Pennsylvania State College, *The Philadelphia Wholesale Fruit and Vegetable Market*, 4, 100–101; "Mass Distribution Cuts Market Spread," *Chicago Packer*, May 8, 1937; "'Change' Plagues Public Markets," 37.

75. Crow, *Wholesale Markets for Fruits and Vegetables in 40 Cities*. The BAE annual report for 1938 emphasized the wide circulation and favorable reception that Crow's publication received in newspapers and trade organizations. See USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1938), 35.

76. USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1938), 1, 30–35.

77. USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1938), 2–5.

78. USDA, BAE, *Report of the Chief of the Bureau of Agricultural Economics* (1938), 2–3, 10, 49, 91, 101.

79. Levinson, *The Great A&P and the Struggle for Small Business in America*, 105–6, 167, 203–10. As Levinson demonstrates, A&P passed its savings on to the consumer in the form of cheap prices, but this strategy also got them embroiled in price discrimination charges in the wake of the Robinson-Patman Act of 1936.

80. Crow, *Wholesale Markets for Fruits and Vegetables in 40 Cities*, 32.

81. Crow, *The Wholesale Fruit and Vegetable Market in Kansas City*, 25–26.

82. Wales, "The Kansas City Wholesale Fruit and Vegetable Market," 161–62. Pendergast served a sentence in a federal penitentiary for nonpayment of income tax.

83. "The First Units of Kansas City's Wholesale and Retail Market," *Kansas City Star*, October 30, 1938.

84. DeOreo and Fean specialized in loading and packing produce for long-distance shipping—everything from melons and cantaloupes to apples and sweet potatoes—until finally establishing themselves as promoters of produce terminals in various cities. See "William Fean in Melon and Cantaloupe Deal," *Chicago Packer*, July 29, 1922; "Columbus Ohio Street Notes," *Chicago Packer*, July 2, 1938; and "A Large Delegation from Kansas City to Apple Meet," *Chicago Packer*, August 6, 1938.

85. Harold Ickes, secretary of the interior, denied the city's first application for a PWA grant, objecting to DeOreo and Fean getting $180,000 over a period of thirty years for their services as exclusive rental agents. A later application for $1,710,000 won approval in October 1938, after the objection was sustained and Kansas City, Kansas, agreed to pay DeOreo and Fean. See "Federal Aid to Kansas City, Kan. Market Project," *Chicago Packer*, October 15, 1938; "Fraud Alleged in PWA Grant to Kansas City," *Baltimore Sun*, November 30, 1938.

86. 313 US 450. Union Pacific Railroad Company v. United States, June 2, 1941; Wales, "The Kansas City Wholesale Fruit and Vegetable Market," 172.

87. Letter from Robert Rice (Col. & Southern) to E. Flynn (Chicago, Burlington & Quincy), December 19, 1938. In Records of the Denver Market and Produce Terminal, Record Group 1116, Folder 248, Colorado Historical Society; "300 Demand Market on Wazee St.," *Rocky Mountain News*, February 14, 1939; "Denver to End Operation of City Market," *Denver Post*, February 25, 1939; "City Market Abandonment Considered by Officials," *Rocky Mountain News*, February 26, 1939; "Ordinance Drafted to Give Money for Market Back to PWA," *Denver Post*, March 2, 1939.

88. "Railroads to Build Big Wazee Market at Cost of Million," *Denver Post*, March 10, 1939; "Wazee Market Report," typescript, March 19, 1945. In Records of the Denver Market and Produce Terminal, Inc., Colorado Historical Society, RG 1116, Folder 236. The Wazee Market was razed shortly after the Denver Urban Renewal Authority purchased the site for the Auraria Higher Education Center. See "Denver Urban Renewal Authority Pay $2.7 Million for 5 Blocks," *Denver Post*, November 12, 1974.

89. “Growers Pledge Money to Build Market of Own,” *Denver Post*, December 3, 1938; “All Hands Were Raised High,” *Denver Post*, December 8, 1938; “Ground Broken for New Produce Market,” *Denver Post*, December 19, 1938; “A Modern Produce Market,” *Denver Post*, February 1, 1939; “Denver Street Notes,” *Chicago Packer*, March 25, 1939. After a fire devastated the market on July 7, 1991, the site was redeveloped and is currently the Yards at Denargo Market—a high-end apartment community.

90. Short and Stanley-Brown, *Public Buildings*, i-xi, 420, 423, 427.

91. Short and Stanley-Brown, *Public Buildings*, 618, 628–29, 631; Quincy, *Quincy’s Market*, 138; *Boston Globe*, May 23, 1936; Stier and Keeling, “A Treatise on the Famous French Market in New Orleans, Louisiana,” 23.

92. *Center Market: Washington, D.C.*, Dorothea Lange, June–July 1936, Lot 1407, FSA-OWI Photograph Collection, Library of Congress; *Washington, D.C. Farmers’ Market*, Marjory Collins, July 1942, Lot 184 (M), FSA-OWI Photograph Collection, Library of Congress.

93. *Fruit Market, Benton Harbor, Berrien County, Michigan*, John Vachon, 1940, Lot 1050, FSA-OWI Photograph Collection, Library of Congress. The field notes for this lot indicate that Vachon was on assignment for the Labor Division of the FSA, in order to document migrant workers, fruit tramps, and families from Arkansas, California, Florida, Illinois, Louisiana, Tennessee, and Texas as they moved to Berrien County, Michigan, to harvest cherries and strawberries for the produce market.

94. *Chicago, Illinois: Food Distribution*, John Vachon, June–July 1941, Lot 1076, FSA-OWI Photograph Collection, Library of Congress. On Vachon in Chicago, see Reid and Viskochil, eds., *Chicago and Downstate*, 11.

95. *New York, NY: Wholesaling Fresh Fruits and Vegetables in New York City*, Arthur Rothstein, April 1939, Lot 1295, FSA-OWI Photograph Collection, Library of Congress; *New York, New York*, Gordon Parks, May–June 1943, Lot 0781, FSA-OWI Photograph Collection, Library of Congress.

96. *New Orleans, La: A Miscellany of Views of Streets and Buildings, Details and Photographs of People*, Carl Mydans, June 1936, Lot 1680, FSA-OWI Photograph Collection, Library of Congress.

97. *San Angelo, Texas: Food Supplies*, Russell Lee, 1939, Lot 578 (M), FSA-OWI Photograph Collection, Library of Congress; *San Antonio, Texas: Fruit and Vegetable Market*, Russell Lee, March 1939, Lot 0859, FSA-OWI Photograph Collection, Library of Congress. On Lee in Texas, see Reid, *Picturing Texas*.

98. For examples, see the South Water Market in Federal Writers’ Project (IL) and Henry Horner, Governor, *Illinois*, 269; the Niagara Frontier Food Terminal in Federal Writers’ Project (NY) and New York State Historical Association, *New York*, 226; Benton Harbor and Grand Rapids in Federal Writers’ Project (MI) and Michigan State Administrative Board, *Michigan*, 205, 273, 313–14; and Dock Street Market in Federal Writers’ Project (PA) and Pennsylvania Historical Commission, *Philadelphia*, 405–6.

Chapter 6 • Industrial Parks and the USDA Paradigm

1. Bowers, “The Research and Marketing Act of 1946 and Its Effects on Agricultural Marketing Research,” 253–60; Mainzer, “Science in a Political Context.”

2. Trelogan, "Marketing Research in the United States during the Past Five Years," 938–39.

3. Umsted, "Where the Food Dollar Goes," in USDA, PMA, *Marketing Activities*. "Agribusiness" was a neologism proposed in 1955 by Harvard Business School professor John H. Davis, who declared that government agencies and corporations should cooperate to boost the marketing of farm products. See Hamilton, *Trucking Country*, 113–14.

4. US Department of Commerce, Bureau of the Census, *United States Census of Business, 1948—*, 7–8, 14; "Cities Plan Terminal Markets," *Business Week*, December 22, 1945, 76, 78.

5. "William C. Crow," in "Biographical Sketches—Folder C," USDA History Collection, IX.3, National Agricultural Library, Special Collections; "William Cecil Crow," *Marquis Who's Who*, http://search.marquiswhoswho.com/profile/100001900234. Crow's friends and colleagues affectionately referred to him as "Mr. Produce Market," in recognition of his expertise. See Donofrio, "Attacking Distribution," 158n70.

6. "Improving the Competitive Position of Fresh Fruit and Vegetable Wholesalers," in *Yearbook of the United Fresh Fruit and Vegetable Association*, 137–40. On US expansion of infrastructure, development of high-tech corridors, and the interstate highway system as evidence of the rise of the national security state, see Gerstle, *Liberty and Coercion*, 262–67.

7. Crow, "Produce Market Districts," in *Better Cities . . . Better Business*.

8. "Model for Proposed Wholesale Market by Marketing and Facilities Research Branch of the PMA, January 1948," negative #N-8033 in RG 16-G, Records of the Secretary of Agriculture, Box 236, National Archives.

9. USDA, PMA, *The Wholesale Produce Market Facilities for Philadelphia, Pa.*; USDA, PMA, *The Wholesale Produce Market at St. Louis, Mo.*; USDA, PMA, *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs in Hartford, Conn.*; USDA, PMA, *The Wholesale Produce Market at Bridgeport, Conn.*; USDA, PMA, *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs at Richmond, Va.*; USDA, PMA, *The Wholesale Produce Market at Norfolk, Va.*; USDA, PMA, *The Wholesale Markets for Fruits, Vegetables, Poultry, and Eggs in Atlanta, Ga.*; USDA, PMA, *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs at Savannah, Ga.*; USDA, PMA, *The Wholesale Fruit and Vegetable Market of Miami, Fla.*; USDA, PMA, *The Wholesale Fruit and Vegetable Markets of Tampa, Fla.*; USDA, PMA, *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs in Baton Rouge, La.*.

10. USDA, PMA, *The Wholesale Produce Market at Asheville, N.C.*; USDA, PMA, *The Wholesale Produce Market at Winston-Salem, N.C.*; USDA, PMA, *The Wholesale Markets for Fruits, Vegetables, Poultry, and Eggs at Greenville, S.C.*; USDA, PMA, *The Wholesale Marketing of Produce in the Beckley, W.Va. Area*; USDA, PMA, *The Wholesale Produce Market at Huntington, W.Va.*; USDA, PMA, *The Wholesale Produce Market Facilities at Waco, Tex.*; USDA, PMA, *The Wholesale Markets for Fruits, Vegetables, Poultry, and Eggs at Tulsa, Okla.*

11. USDA, PMA, *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs in New Haven, Conn.*; USDA, PMA, *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs in Columbus, Ohio*; USDA, AMS, *Wholesale Produce Markets of San Diego,*

Calif.; Planning Board of San Antonio and Bexar County, Texas, *The Wholesale Produce Market of San Antonio*; City Planning Commission of Cincinnati, *The Wholesale Fruit and Vegetable Market of Cincinnati*.

12. Letter from Sherwood L. Reeder, Director of Master Planning, City Planning Commission, Cincinnati, to Wendell Calhoun, February 17, 1947. In RG 83, Entry 20, "Marketing" subject folder, National Archives. The USDA mailed its wholesale produce market studies via the American consulates at the request of agricultural agencies abroad and in some cases reprinted by permission. For an example, see "How to Feed 10 Million Mouths [New York]."

13. Letter from Wendell Calhoun, Berkeley, CA, to Mr. C. W. Kitchen, United Fresh Fruit and Vegetable Association, Washington, DC, November 6, 1946. In RG 83, Entry 20, "Marketing" subject folder, National Archives; Letter from Wendell Calhoun, Berkeley, CA, to John W. Crill [Member of the Citrus Committee of the American Farm Bureau Federation], Anaheim, CA, November 6, 1946. In RG 83, Entry 20, "Marketing" subject folder, National Archives.

14. Planning Board of San Antonio and Bexar County, Texas, *The Wholesale Produce Market of San Antonio*, vii-viii, 10.

15. USDA, BAE, *The Fruit and Vegetable Market of Huntington, West Virginia*; USDA, BAE, *The Wholesale Fruit and Vegetable Market of St. Louis*; USDA, BAE, *Traffic Conditions in the Wholesale Fruit and Vegetable Market District of San Francisco*; USDA, BAE, *Improving the San Francisco Wholesale Fruit and Vegetable Market*.

16. Letter from Wendell Calhoun, Berkeley, CA, to J. Stanford Larson, Acting Chief, Marketing Facilities Branch, PMA, June 12, 1947. In RG 83, Entry 20, "Marketing" subject folder, National Archives. Emphasis original.

17. Letter from Wendell Calhoun, Berkeley, CA, to Prof. D. Gray Miley, Agricultural Experiment Station, Mississippi State College, December 12, 1946. In RG 83, Entry 20, "Marketing" subject folder, National Archives.

18. USDA, PMA, *Marketing Facilities for Farm and Related Products at San Juan, Puerto Rico*. On the role of containerization in the development of the San Juan port, see Levinson, *The Box*, 71–75.

19. "How to Feed a Metropolis [New York City]," 88; USDA, Working Group on Conversion of Marketing Facilities and Methods of the Interbureau Committee on Postwar Programs, *Air Transport of Agricultural Perishables*, 7–21; Kansas City (MO) City Plan Commission, *Agriculture, Greater Kansas City*, 53.

20. Hamilton, "Agribusiness, the Family Farm, and the Politics of Technological Determinism in the Post–World War II United States"; Hamilton, "Long-Haul Trucking and the Technopolitics of Industrial Agriculture, 1945–1975," in Lisa Rosner, *The Technological Fix*.

21. Butterworth, "The Chicago Wholesale Fresh Fruit and Vegetable Market"; USDA, Federal-State Market News Service, Fruit and Vegetable Branch, "Benton Harbor Cash Market Fruit and Vegetable Summary, 1946 Season May 26 to November 5," 1.

22. Reck, *Horses to Horsepower*, 12–20.

23. "Containers at the Crossroads"; Du Pont de Nemours (E.I.) and Company, Wilmington, DE, Cellophane Division, *Merchandising Trends in Fresh Fruits and Vegetables* [ca. 1940], Hagley Museum and Library, Trade Catalogs; Reck, *Horses to*

Horsepower, 13. On the use cellophane in meat merchandising, see Horowitz, *Putting Meat on the American Table*, 66, 137–42.

24. "Speed Record on Construction of Union Produce Terminal," 141; Branch and Thierwechter, "Modern Wholesale Produce Terminal Facilities for the Larger Cities," 8.

25. Quoted in Reck, *Horse to Horsepower*, 20.

26. Planning Board of San Antonio and Bexar County, Texas, *The Wholesale Produce Market of San Antonio*, vii.

27. Smith, *Bill's Story of the Wholesale Produce Market*.

28. "Produce Plight," 82; US House Committee on Agriculture, *Development and Improvement of Terminal Marketing Facilities*, 8–11.

29. US House Committee on Agriculture, *Development and Improvement of Terminal Marketing Facilities*, 12–14.

30. US House Committee on Agriculture, *Development and Improvement of Terminal Marketing Facilities*, 58–59, 92–104.

31. US House Committee on Agriculture, *Development and Improvement of Terminal Marketing Facilities*, Questions by William S. Hill, 85; Statement of M. Oldham Lewis, 217–19; Questions by Clifford R. Hope, 88–89; Questions by William S. Hill, 121; Statement of Louis D. Goldstein, 44; Statement of John C. Leonard, 125. See Fetters, *The Lustron Home*.

32. US House Committee on Agriculture, *Development of Marketing Facilities, Hearings Before the Committee on Agriculture House of Representatives Eighty-Fourth Congress*, 15.

33. US House Committee on Agriculture, *Development of Marketing Facilities, Hearings Before the Committee on Agriculture House of Representatives Eighty-Fourth Congress*, 22.

34. US House Committee on Agriculture, *Development of Marketing Facilities, Hearings Before the Committee on Agriculture House of Representatives Eighty-Fourth Congress*, 11.

35. The most notorious exposé is Whitman's three-part series "Filth in Our Food." See also Maddox, "Filthy, Inefficient Wholesale Markets Pad Your Food Bill," 181–82.

36. Maddox, "Filthy, Inefficient Wholesale Markets Pad Your Food Bill," 42–45.

37. Maddox, "Filthy, Inefficient Wholesale Markets Pad Your Food Bill," 8–11.

38. Hamilton, *Trucking Country*, 111–18; Wells et al., "The Fragmentation of the BAE." For a summary of the reorganization of the USDA under Benson and its long-term implications, see Larson and Zimmerman, *Sociology in Government*, 281–82.

39. Hamilton, "Long-Haul Trucking and the Technopolitics of Industrial Agriculture, 1945–1975," in Rosner, *The Technological Fix*, 100–104; Schapsmeier and Schapsmeier, *Ezra Taft Benson and the Politics of Agriculture*.

40. US House Committee on Agriculture, *Development of Marketing Facilities, Hearings Before the Committee on Agriculture House of Representatives Eighty-Fourth Congress*, 20.

41. Crow, "Industry Cooperation in Marketing Facilities Studies." For more on the cooperation between the USDA and industry on facilities for the marketing and

distribution of frozen foods, see Larson and Mixon, *Planning a Wholesale Frozen Food Distribution Plant*, and Larson, Mixon, and Stokes, *Marketing Frozen Foods*. US Department of the Interior, Fish and Wildlife Service, *Distribution of Marketing of Frozen Fishery Products*.

42. "Houston Produce Terminal."

43. For more on the culture of clearance, see Ammon, *Bulldozer*.

44. USDA, PMA, *The Wholesale Market for Fruits, Vegetables, Meat and Meat Products, Poultry, Eggs, and Other Produce at Houston, Tex*. Of the five possible sites recommended in the 1948 USDA report, Site No. 2 was the first choice. Differences between the building plans proposed by the USDA in 1948 and those actually built in 1954 are few, with the exception of two restaurants originally proposed—"one for white patrons and the other for Mexican laborers" (47). In *Hernández v. State of Texas* (1954), the United States Supreme Court declared Mexican Americans to be a class to whom Jim Crow laws did not apply, and the terminal as constructed included a single cafeteria.

45. American Society of Planning Officials, *Wholesale Produce Markets*, 20–21.

46. American Society of Planning Officials, *Wholesale Produce Markets*, 9–12.

47. American Society of Planning Officials, *Wholesale Produce Markets*, 22; Rubin, *A Negotiated Landscape*, 70–83, 344n24. As Rubin explains, redevelopment agencies are quasi-independent government agencies that use eminent domain to acquire property; they are not subject to local zoning ordinances; and they can establish tax increment financing—a type of state-sponsored speculation whereby the agency can float bonds secured against future tax revenue.

48. Gregory Donofrio offers an excellent case study of the impact of urban renewal on Philadelphia's Dock Street Market in "Attacking Distribution."

49. New Jersey State College of Agriculture and Pennsylvania State College, *The Philadelphia Wholesale Fruit and Vegetable Market*; "Philadelphia—Proposed Produce Market 1945" folder, Accession 1807/1810/2123 Penn RR Co., Chief Engineer—Eastern Region, Box 1487, Hagley Museum and Library.

50. "Dock St. Shift to Delaware, Oregon Aves. Urged," *Philadelphia Inquirer*, January 19, 1951; Adde, *Nine Cities*, 31–33 (also quoted in Donofrio, "Attacking Distribution"). For an early argument that a produce market was a misuse of valuable real estate, see "Improper Land Use, Not Taxation, Held Cause of New York's Blight." The demolition of Dock Street Market was justified because its industrial land use was incompatible with new development, although the preservation community did save certain historic residences in the neighborhood. See Donofrio, "'The Container and the Contained,'" 154–55.

51. USDA, PMA, *The Wholesale Produce Market Facilities for Philadelphia, Pa*.; USDA, AMS, *Wholesale Food Distribution Facilities for Philadelphia, Pa*.

52. "Produce Mart Gets Elbow Room," 61.

53. New York State, Temporary Commission on Agriculture, *Interim Report on a Study of the Washington Street Produce Market in New York City*; New York State, Temporary Commission on Agriculture, *Report of the New York State Temporary Commission on Agriculture Including Report on a Study of the Washington Street Produce Market in New York City and the Possibility of Improving Facilities for Distribution of Food in the New York Metropolitan Area*.

54. Nielson, “The Wholesale Produce Market in New York City,” 135.

55. Downtown–Lower Manhattan Association, Inc., *Lower Manhattan*, 4–6. For more on the origins, planning principles, and architectural legacy of Rockefeller Center, see Bacon, “Rockefeller Center,” in O’Malley and Wolschke-Bulmahn, eds., *Modernism and Landscape Architecture, 1890–1940*.

56. New York City, Department of Markets, *A Study of Washington Retail Market*; Pomeroy and Schulman, *Program Study for the New York State Chamber of Commerce Committee on Lower Manhattan Redevelopment*. For an excellent summary of prior reports, see Friedman, “A Planning Study of Lower Manhattan,” esp. 26–41.

57. Clowes, Elliott, and Crow, *Wholesale Food Market Facilities*, 78; New York Agriculture and Markets Law, Article 22, Sect. 268, 1955 rev.

58. Charles Grutzner, “Plan to Rebuild Downtown Area Outlined to City,” *New York Times*, October 15, 1958; “Old Mart Brings $1,106,000 to City,” *New York Times*, September 19, 1959; “Buyers to Begin Razing Old Washington Market,” *New York Times*, January 8, 1960.

59. SOM was also active in San Francisco, working for the city planning commission on redevelopment plans for an area occupied by the wholesale produce market. The city declared this area blighted in 1954, thus making it eligible for urban renewal funds that resulted in development of the Embarcadero Center and the removal of the market to Bayview. See Redevelopment Agency of the City and County of San Francisco in Cooperation with the Department of City Planning; Skidmore, Owings & Merrill [San Francisco Office], *Embarcadero–Lower Market Redevelopment Project Area E-1*.

60. Madigan-Hyland and Skidmore, Owings & Merrill, *Summary of Preliminary Studies for a New York City Terminal Market at Hunts Point, the Bronx*.

61. Madigan-Hyland and Skidmore, Owings & Merrill, *Summary of Preliminary Studies for a New York City Terminal Market at Hunts Point, the Bronx*; Masciarelli, “New Hunts Point Market,” 13, 45–49; “Bronx Food Mart to End Crowding,” *New York Times*, February 22, 1960; “Mayor’s Press Releases,” February 26, 1960, Municipal Library, New York City Department of Records.

62. “New City Market in Bronx Backed,” *New York Times*, May 18, 1959. The Fulton Fish Market did not move to Hunts Point until 2005. See Dan Barry, “A Last Whiff of Fulton’s Fish, Bringing a Tear,” *New York Times*, July 10, 2005.

63. Skidmore, Owings & Merrill, *Washington Street Area Redevelopment Study Prepared for the City of New York Department of City Planning, Preliminary Report*; “Offices to Cover Old Market Site,” *New York Times*, September 8, 1960; Jackier, “Moving Historic Structures,” esp. 20–44.

64. USDA, AMS, *New York City Wholesale Fresh Fruit and Vegetable Markets*; New York City, Department of Markets, “Annual Report” (1962–1963).

65. Arnold H. Lubasch, “City Starts Huge Produce Market in Bronx,” *New York Times*, March 28, 1962; Charles G. Bennett, “Markets in City Found Outmoded,” *New York Times*, April 12, 1962; “New Market Site Cleared in Bronx: Hunts Point Facility to Serve 16 Million is Fully Rented,” *New York Times*, May 6, 1962; Madigan-Hyland and Skidmore, Owings & Merrill, *New York City Terminal Market Study*.

66. Albin Krebs, “Truckload of Onions Opens Hunts Point Market,” *New York Times*, March 7, 1967.

67. For more on SOM buildings and their "welcoming lantern" affect at night, especially the Pepsi-Cola headquarters in New York City, see Nicholas Adams, *Skidmore, Owings & Merrill*, 126–33.

68. SOM's participation in the design of the New York City Terminal Market and other large market projects is absent from the histories of the firm. For more on its contribution to the built environment, its team approach to design, and its skill in handling complex projects, see Jung, "Organization and Abstraction," esp. 139–96.

69. Madigan-Hyland and Skidmore, Owings & Merrill, *New York City Terminal Market Study*; New York City, Department of Markets, "Annual Report" (1966).

70. "Hunts Point," 5, 24–28; "Hunts Point Cooperative Market," 5; "Food Manufacturing Complex of Hunts Point Food Center Opens $12,000,000 Food Processing Plant," 3; Eisenpreis, "Hunts Point—Dramatic Expansion."

71. Bechtel, *Executive Summary, Hunts Point Food Center, the City of New York*; Brasfield, "World's Largest Market Joins the Jet Age," in USDA, *Yearbook of Agriculture*.

72. Taylor and Miller, *Baltimore Regional Wholesale Food Distribution Facilities*, 1–11.

73. Gritzan, "Market Facilities in Baltimore in Relation to Needs of Retail Grocers," 15–27; quote on 23.

74. "Baltimore Wholesale Fruit and Vegetable Markets Commission," in *Maryland Manual, 1943–1944*, 132; Council of State Governments, *Suggested State Postwar Legislation*; Maryland State Planning Commission, *Report on Wholesale Market Facilities for Greater Baltimore Area*, 59–81.

75. Correspondence of Samuel Hecht. In New Marsh Wholesale Produce Market, Baltimore City Archives, BCA BMS1-1-2.

76. Letter from Samuel Hecht to Theodore R. McKeldin, Governor, April 5, 1957. In New Marsh Wholesale Produce Market, Baltimore City Archives, BCA BMS1-1-1; "Produce Mart Gets Elbow Room," 61–62.

77. Albert Hiaback, "Important Factors in Financing Public Markets," typescript, 1958. In New Marsh Wholesale Produce Market, BCA BMS1-1-1.

78. For correspondence and architect's drawings, see New Marsh Wholesale Produce Market, BCA BMS1-1-1 and BCA BMS 1–4.

79. James D. Dilts, "Relocation Plan Grew Ever Grander," *Baltimore Sun*, July 24, 1973.

80. Taylor and Miller, *Baltimore Regional Wholesale Food Distribution Facilities*, 47; Greater Baltimore Consolidated Wholesale Food Market Authority, *Annual Report* (1970).

81. Dilts, "Relocation Plan Grew Ever Grander"; Greater Baltimore Consolidated Wholesale Food Market Authority, *Annual Report* (1970).

82. Taylor and Miller, *Baltimore Regional Wholesale Food Distribution Facilities*; Croushorn, "Impact of a Food Distribution Center on Produce Handling and Distribution."

83. Crow, "Changes in Marketing Facilities," in *Yearbook of Agriculture, 1960*.

84. Hedden, *How Great Cities Are Fed*, 17.

85. For an excellent account of the development of quasi-public agencies to meet infrastructure needs, see Radford, *The Rise of the Public Authority*.

86. Manchester, *The Structure of Wholesale Produce Markets*. Many of the individual city and regional reports of the USDA Economic Research Service summarized by Manchester are available at www.archive.org.

Conclusion

1. Gilbert, "Agrarian Intellectuals in a Democratizing State," in Stock and Johnston, *The Countryside in the Age of the Modern State*, 259; Gilbert and O'Connor, "Leaving the Land Behind," in Jacobs, *Who Owns America?*, 125–26. For a critical analysis of Edwin Nourse as first chair of the CEA, see Bernstein, *A Perilous Progress*, 109–12.

2. Hedden, *Mission*.

3. The work of the FAO culminated in a standard international guide for the planning and construction of wholesale markets and is available online and in several languages. See Mittendorf, *Planning of Urban Wholesale Markets for Perishable Food*, and Tracey-White, *Wholesale Markets*.

4. On Europe as "the client continent" for American economic and cultural hegemony after World War II, see Rodgers, *Atlantic Crossings*, 502–3.

5. Crow, "Exhibit at Paris," 3.

6. TenHoor, "Markets and the Food Landscape in France, 1940–72," in Imbert, *Food and the City*, 333–351. Just as the French government created a network of sixteen "Markets of National Interest" to modernize and rationalize the system, the government of Spain established the MERCASA enterprise to promote and manage a network of twenty-three wholesale markets with the municipalities. See Cadilhon et al., "Wholesale Markets and Food Distribution in Europe."

7. "Easing the Bellyache," 30; "Les Halles Pooh-Poohs Reform," 30–31.

8. Ministry of Finance and Economic Affairs, Ministry of Agriculture, Food and Agriculture Organization, Organisation for Economic Co-operation and Development, *Le Ravitaillement des Grandes Villes*; Crow, "The Need for Better Marketing Facilities."

9. "Washington, D.C.—William C. Crow, Director of the Transportation and Facilities Research Division, Agricultural Research Service, is Presented with the Chevalier de l'Ordre du Mérite Agricole."

10. William C. Crow, "Putting More Go-Go in Cargo—Containers and World Trade," in USDA, *The Yearbook of Agriculture 1968, Science for Better Living*; Jumper, "Wholesale Marketing of Fresh Vegetables."

11. Levinson, *The Box*, 10–11.

12. Dan Barry, "A Last Whiff of Fulton's Fish, Bringing a Tear," *New York Times*, July 10, 2005.

13. John Handley, "To Market We Go: Historic Produce Center Joins the Fertile Fields of Near West Side Housing, *Chicago Tribune*, February 22, 2004; Joseph N. DiStefano, "Philly Deals: Phila. Wholesale Produce Market Is Bearing Fruit, *Philadelphia Inquirer*, June 17, 2014; Patrick McGeehan, "City Makes Deal to Keep Market at Hunts Point," *New York Times*, December 31, 2013; Margaret Jackson, "Denargo Market to Be Revitalized," *Denver Post*, May 3, 2007; "RiNo's Yards at Denargo Market, an Apartment Complex in Denver's Red-Hot River North Neighborhood, Has Sold for $72 Million," *Denver Business Journal*, June 18, 2015.

14. Tom Burfield, “New Produce Market Planned for San Antonio, *The Packer*, November 25, 2013; Richard Webner, “$16 Million Produce Distribution Center to Open on South Side,” *San Antonio Express-News*, October 19, 2015. Abasto Properties, LLC, a sister company of Abasto Corporation, has been building wholesale produce markets in Mexico and South Texas since 1983. See Iván Cruz, “New Wholesale Market Opens in San Antonio, Texas,” press release, October 1, 2015, https://abasto.com/en/press-release/new-wholesale-market-opens-in-san-antonio-texas/. For more on the impact of new wholesale markets on growers, truckers, and their communities, see Alvarez, *Mangos, Chiles, and Truckers*.

15. Institut Municipal de Mercats de Barcelona, *Urban Markets*, 48–53, 97; Miller, *Feeding Barcelona 1714–1975*, 117–18, 249.

BIBLIOGRAPHY

Archival Collections

Center Market Commission, BRG 42, Baltimore City Archives

Charles E. Magoon Collection on Produce Marketing (Accession 2016.214), Hagley Museum and Library

City Planning Vertical Files, Manuscripts and Archives Department, Hagley Museum and Library

FSA-OWI Black-and-White Negatives, Library of Congress, Prints and Photographs Division

Historic American Building Survey, Library of Congress, Prints and Photographs Division

Historic American Engineering Record, Library of Congress, Prints and Photographs Division

New Marsh Wholesale Produce Market, BMS1, Baltimore City Archives

New York City, Department of Markets, Annual Reports, City Hall Library

New York City, Mayor's Press Releases, City Hall Library

New York City, Office of the Mayor, James J. Walker Administration, Departmental Correspondence Received, Municipal Archives of the City of New York

Office of the Governor, Council of National Defense and Committee of Public Safety, RG 10, State Archives of Pennsylvania

Pamphlets and Trade Catalogs, Hagley Museum and Library

Pennsylvania Railroad Company Records, Accession 1807, Manuscripts and Archives Department, Hagley Museum and Library

RG 1116, Records of the Denver Market and Produce Terminal, Colorado Historical Society

RG 16, Records of the Secretary of Agriculture, National Archives

RG 328, Records of the National Capital Planning Commission, National Archives

RG 66, Records of the Commission of Fine Arts, National Archives

RG 69, Records of the Work Projects Administration, National Archives

RG 83, Records of the Bureau of Agricultural Economics, National Archives

USDA History Collection, National Agricultural Library, Special Collections

Public Documents

313 US 450. Union Pacific Railroad Company v. United States, June 2, 1941.

Baltimore, Mayor and City Council. *The Baltimore Book: Municipal Activities and General Development of the City of Baltimore*. Baltimore, 1912.

"Baltimore Wholesale Fruit and Vegetable Markets Commission." Chapter 972, Acts of 1943. In *Maryland Manual, 1943–1944*, vol. 160. Archives of Maryland Online, Maryland State Archives.

Bechtel. *Executive Summary, Hunts Point Food Center, the City of New York*. New York: Department of Marine and Aviation, May 1968.

Boston City Planning Board. *A Summary of the Market Situation in Boston; Preliminary Report of the Market Advisory Committee, June 1915*. Boston: Printing Department, 1916.

Boston Joint Special Committee on Free Markets. *Report of the Joint Special Committee on Free Markets*. City Document No. 91. Boston, 1870.

Bradley, Betsy. *Tribeca North Historic District Designation Report*. New York, 1992.

——. *Tribeca West Historic District Designation Report*. New York: Landmarks Preservation Commission, 1991.

Burdette, Roger F., and S. H. DeVault. *The Baltimore Wholesale Fruit and Vegetable Markets*. University of Maryland, Agricultural Experiment Station, Bulletin no. 409, 1937.

Calvin D. Caldwell v. City of Alton. In Norman L. Freeman, *Reports of Cases at Law and in Chancery Argued and Determined in the Supreme Court of Illinois*, vol. 33, 416–21. Chicago: E. B. Myers and Chandler, 1866.

Capron, Horace. "The Market Systems of the Country, Their Uses and Abuses." In *Annual Report of the Commissioner of Agriculture for the Year 1870*, 241–54. Washington, DC, 1871.

Central Market Company v. Erie, 44 Pa. Superior Ct 183 (1910). In *Pennsylvania Superior Court Reports*, vol. 44, 191–99. New York: Banks, 1911.

Chicago Municipal Markets Commission. *Preliminary Report to the Mayor and Aldermen of the City of Chicago by the Chicago Municipal Markets Commission*. Chicago: H. G. Adair, 1914.

City Planning Commission of Cincinnati. *The Wholesale Fruit and Vegetable Market of Cincinnati, Present Operations and Future Needs*. Cincinnati: USDA, BAE, 1946.

Clowes, Harry G., William H. Elliott, and William C. Crow. *Wholesale Food Market Facilities: Types of Ownership and Methods of Financing*. Marketing Research Report No. 160. Washington, DC: USDA, AMS, 1957.

——. *Wholesale Produce Markets of San Diego, Calif.* Washington, DC, 1954.

Council of State Governments. *Suggested State Postwar Legislation: Federal-State Program for 1946–1947, Developed by the Council of State Governments and Federal Administrative Agencies in Cooperation with the Department of Justice, December 1, 1945*. Chicago, 1945.

Cour de Cassation (France). *Recueil Général des Lois et des Arrêts*, J.-B. Sirey, ed., 2e Série. Paris: Bureaux de l'Administration du Recueil, 1858.

Crouch, Harry E. *A Report Setting Forth the Marketing Practices and Market Needs of the Lower Hudson Regional Market District, Together with Plans Proposed by the*

Authority for a Regional Market at Newburgh and a Local Market at Poughkeepsie. Ithaca, NY: Cornell University, 1934.

Crouch, Harry E., and E. R. McNeil. *Market Facilities of the Central Hudson District with a Plan for Improving Such Facilities*. Albany: New York State Department of Agriculture and Markets, 1928.

Crow, William C. *The Wholesale Fruit and Vegetable Market in Kansas City*. Washington, DC: USDA, BAE, 1937.

———. *Wholesale Markets for Fruits and Vegetables in 40 Cities*. Washington, DC: USDA, BAE, 1938.

Crow, William C., Wendell T. Calhoun, and James William Park. *A Special Report: The Wholesale Fruit and Vegetable Markets of New York City*. Washington, DC: USDA, BAE, 1940.

District of Columbia. *Annual Report of the Commissioners of the District of Columbia*. Washington, DC, [1907–1916].

———. *Laws of the Corporation of the City of Washington, Passed by the Fifty-Fourth Council*. Washington, DC: G. S. Gideon, 1857.

———. *Laws of the Corporation of the City of Washington, Passed by the Sixty-Third Council*. Washington, DC: J. L. Pearson, 1866.

Donaldson, R. B. *Philadelphia Wholesale Fruit and Vegetable Markets*. Bulletin 349, Pennsylvania State College, School of Agriculture and Experiment Station, 1937.

Downtown–Lower Manhattan Association, Inc. *Lower Manhattan: Recommended Land Use, Redevelopment Areas, Traffic Improvements, 1st Report*. New York, 1958.

Edwards, Brice, and J. W. Park. *The Marketing and Distribution of Fruits and Vegetables by Motor Truck*. Technical Bulletin No. 272. Washington, DC: USDA, BAE, October 1931.

Edwards, Sidney A. *A Regional Market for Connecticut*. Bulletin No. 45, Hartford: Connecticut Department of Agriculture, Bureau of Markets, February 1937.

Florida, Department of Agriculture. *Florida State Farmers' Markets*. Tallahassee, 1942.

Florida, Department of Agriculture. *The State Farmers' Markets of Florida, Their Purpose and Aim*. Tallahassee, 1941.

Greater Baltimore Consolidated Wholesale Food Market Authority. *Annual Report*. Baltimore, June 30, 1969.

———. *Annual Report*. Baltimore, June 30, 1970.

Hurst, W. M. Cooperative Research and Service Division. *Farmers' Produce Markets in the United States, Part II, Plans and Facilities*. Misc. Report No. 107. Washington, DC: USDA, Farm Credit Administration, May 1947.

Kansas City (MO) City Plan Commission. *Agriculture, Greater Kansas City*, 1945.

Kerbey, McFall. "Open Types of Public Markets." Bulletin No. 1002. USDA, Bureau of Markets, December 23, 1921.

Larson, J. Stanford, and James A. Mixon. *Planning a Wholesale Frozen Food Distribution Plant*. Marketing Research Report. Washington, DC: USDA, PMA, 1952.

Larson, J. Stanford, James A. Mixon, and E. Clinton Stokes. *Marketing Frozen Foods: Facilities and Methods*. Washington, DC: USDA, PMA, 1949.

Madigan-Hyland. *Preliminary Studies for a Fresh Fruit and Vegetable Wholesale Produce Market, New York City*, vol. 1, Factual Data. New York: Department of Public Works for Department of Markets, 1943.

Madigan-Hyland and Skidmore, Owings & Merrill. *New York City Terminal Market Study. Meat and Poultry—Butter, Eggs, and Cheese*. New York: Department of Public Works, April 9, 1964.

———. *Summary of Preliminary Studies for a New York City Terminal Market at Hunts Point, the Bronx*. New York: Department of Public Works, 1959.

Manchester, Alden C. *The Structure of Wholesale Produce Markets*. Agricultural Economic Report No. 45. Washington, DC: USDA, Economic Research Service, April 1964.

Market News Service. *Carlot Unloads of Fresh Fruits and Vegetables and Motor Truck Receipts at Callowhill and Dock Street Markets, Philadelphia, Calendar Year 1932*. Philadelphia: USDA, BAE, 1932.

Marks, Marcus M. *Report on Market System for New York City and on Open Markets Established in Manhattan*. New York: M. B. Brown, 1915.

Maryland State Planning Commission. *Report on Wholesale Market Facilities for Greater Baltimore Area*. Baltimore, October 1, 1948.

Massachusetts Commission on the Cost of Living. *Report of the Commission on the Cost of Living*. Boston: Wright and Potter, 1910.

New Jersey State College of Agriculture and Pennsylvania State College. *The Philadelphia Wholesale Fruit and Vegetable Market: A Study of Its Organization, Facilities, and Practice*. Washington, DC: USDA, BAE, 1936.

New York City, Department of Markets. "Annual Report." Typescript, City Hall Library, January 1, 1962–June 30, 1963.

———. "Annual Report." Typescript, City Hall Library, 1966.

———. *A Study of Washington Retail Market: Service and Cost*. New York: Office of the Mayor, August 1955.

New York City, Department of Public Markets, Weights and Measure. "Annual Report." Typescript, City Hall Library, 1934, P92.01.

New York City, Mayor's Market Commission. *Report of the Mayor's Market Commission of New York City*. New York, December 1913.

New York State, Department of Agriculture and Markets. *Annual Report for the Year 1934*. Albany: J. B. Lyon, 1935.

New York State, Temporary Commission on Agriculture. *Interim Report on a Study of the Washington Street Produce Market in New York City*. Pt. 1, Annual Report, Legislative Doc. No. 24, 1954.

———. *Report of the New York State Temporary Commission on Agriculture Including Report on a Study of the Washington Street Produce Market in New York City and the Possibility of Improving Facilities for Distribution of Food in the New York Metropolitan Area*. Legislative Doc., 1955. Municipal Library, City of New York.

Newark (NJ) City Plan Commission. *Report on Public Markets to the Honorable the Mayor and Common Council of the City of Newark, N.J.* January 29, 1913.

Planning Board of San Antonio and Bexar County, Texas. *The Wholesale Produce Market of San Antonio: Motortruck Concentration Market for the Fruit and Vegetables of South Texas*. Washington, DC: USDA, BAE, 1946.

Pomeroy, Hugh R., and S. J. Schulman. *Program Study for the New York State Chamber of Commerce Committee on Lower Manhattan Redevelopment*. New York City and New York State, January 28, 1957.

Postal, Matthew A. *Austin, Nichols & Co. Warehouse*. Designation List 386, LP-2163. New York: Landmarks Preservation Commission, 2005.

Préfecture du Département de la Seine. *Rapport sur l'emplacement des halles centrales de Paris*. Paris: Imprimerie Nationale, June 1851.

Redevelopment Agency of the City and County of San Francisco in Cooperation with the Department of City Planning; Skidmore, Owings & Merrill [San Francisco Office]. *Embarcadero–Lower Market Redevelopment Project Area E-1, A Report on the Tentative Redevelopment Plan*. San Francisco, August 1958.

"Report of the Secretary of Agriculture." In US President, 1913–1921 (Wilson). *The Abridgment 1915: Containing the Annual Message of the President of the United States to the Two Houses of Congress, . . . with Reports of Departments and Selections from Accompanying Papers*, vol. 2, 1480. Washington, DC, 1916.

Royal Commission on Market Rights and Tolls. *Final Report of the Commissioners*. Presented to Both Houses of Parliament by Command of Her Majesty, vol. 11. London: Eyre and Spottiswoode, 1891.

Sherman, Caroline B. *Is the Public Market a Good Civic Investment?* Leaflet No. 73. Washington, DC: USDA, BAE, 1931.

Shockley, Jay. *Gansevoort Market Historic District Designation Report*. New York: Landmarks Preservation Commission, 2003.

Skidmore, Owings & Merrill. *Washington Street Area Redevelopment Study Prepared for the City of New York Department of City Planning, Preliminary Report*. New York: Department of City Planning, February 15, 1960.

Taylor, Earl G., and Franklin J. Miller Jr. *Baltimore Regional Wholesale Food Distribution Facilities*. Marketing Research Report No. 783. Washington, DC: USDA, Agricultural Research Service, February 1967.

Tenny, Lloyd S. *National Standards for Farm Products*. Circular No. 8. Washington, DC: USDA, BAE, August 1, 1927.

US Bureau of the Census. *Municipal Markets in Cities Having a Population of over 30,000*. Washington, DC, 1918.

———. *Statistics of Cities Having a Population of over 30,000: 1908*. Washington, DC, 1910.

US Commission of Fine Arts. *Annual Report*. Washington, DC, June 30, 1916–January 1, 1918.

US Congress. *An Act to Incorporate the Washington Market Company*. Statutes at Large, 41st Congress, 2nd Session, May 20, 1870, chap. 107–09: 124.33.

———. *An Act to Repeal . . . the Charter and Lease Granted . . . to the Washington Market Company*, March 4, 1921, 66th Congress Public Doc. No. 399, H.R. 9036.

———. *Appropriation Bill, 1917, Hearings Before Subcommittee of House Committee on Appropriations, Sixty-Fourth Congress, First Session, January 5, 1916*. Washington, DC, 1916.

USDA. *List of Workers in Subjects Pertaining to Agriculture*. Washington, DC, 1915.

———. *Yearbook of the Department of Agriculture for 1914*. Y. B. Separate 636, Washington, DC, 1915.

USDA, AMS. *New York City Wholesale Fresh Fruit and Vegetable Markets*. Marketing Research Report No. 389. Washington, DC, 1960.

———. *Wholesale Food Distribution Facilities for Philadelphia, Pa*. Marketing Research Report No. 201. Washington, DC, 1958.

USDA, BAE. *Bibliography on the Marketing of Agricultural Products*. Directed by Mary G. Lacy, compiled by Louise O. Bercaw and Esther M. Colvin. BAE Misc. Publ. 150. Washington, DC, 1932.

———. *The Fruit and Vegetable Market of Huntington, West Virginia*. Washington, DC, 1940.

———. *Improving the San Francisco Wholesale Fruit and Vegetable Market*. Berkeley, CA: The Bureau, 1943.

———. *Report of the Chief of the Bureau of Agricultural Economics*. Washington, DC, [1923–1954].

———. "Report of the Chief of the Bureau of Markets." In *Annual Reports of the Department of Agriculture, for the Year Ended June 30, 1917*, 456–57. Washington, DC, 1918.

———. *Traffic Conditions in the Wholesale Fruit and Vegetable Market District of San Francisco*. Berkeley, CA: The Bureau, 1942.

———. *The Wholesale Fruit and Vegetable Market of St. Louis*. Washington, DC, 1941.

USDA, Federal-State Market News Service, Fruit and Vegetable Branch. "Benton Harbor Cash Market Fruit and Vegetable Summary, 1946 Season May 26 to November 5." Typescript, Benton Harbor, MI, December 13, 1946.

USDA, PMA. *Marketing Facilities for Farm and Related Products at San Juan, Puerto Rico*. Washington, DC, 1951.

———. *The Wholesale Fruit and Vegetable Market of Miami, Fla*. Washington, DC, 1947.

———. *The Wholesale Fruit and Vegetable Markets of Tampa, Fla*. Washington, DC, 1947.

———. *The Wholesale Market for Fruits, Vegetables, Meat and Meat Products, Poultry, Eggs, and Other Produce at Houston, Tex*. Washington, DC, 1948.

———. *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs in Baton Rouge, La*. Washington, DC, 1948.

———. *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs in Columbus, Ohio*. Washington, DC, 1948.

———. *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs in Hartford, Conn*. Washington, DC, 1948.

———. *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs at Richmond, Va*. Washington, DC, 1948.

———. *The Wholesale Market for Fruits, Vegetables, Poultry, and Eggs at Savannah, Ga*. Washington, DC, 1950.

———. *The Wholesale Marketing of Produce in the Beckley, W.Va. Area*. Washington, DC, 1952.

———. *The Wholesale Markets for Fruits, Vegetables, Poultry, and Eggs in Atlanta, Ga*. Washington, DC, 1947.

———. *The Wholesale Markets for Fruits, Vegetables, Poultry, and Eggs at Greenville, S.C*. Washington, DC, 1949.

———. *The Wholesale Markets for Fruits, Vegetables, Poultry, and Eggs at Tulsa, Okla*. Washington, DC, 1950.

———. *The Wholesale Produce Market at Asheville, N.C*. Washington, DC, 1951.

———. *The Wholesale Produce Market at Bridgeport, Conn*. Washington, DC, 1953.

———. *The Wholesale Produce Market at Huntington, W.Va*. Washington, DC, 1950.

———. *The Wholesale Produce Market at Norfolk, Va*. Washington, DC, 1950.

———. *The Wholesale Produce Market at St. Louis, Mo*. Washington, DC, 1949.

———. *The Wholesale Produce Market at Winston-Salem, N.C*. Washington, DC, 1951.

———. *The Wholesale Produce Market Facilities for Philadelphia, Pa*. Washington, DC, 1951.

———. *The Wholesale Produce Market Facilities at Waco, Tex*. Washington, DC, 1951.

USDA, Working Group on Conversion of Marketing Facilities and Methods of the Interbureau Committee on Postwar Programs. *Air Transport of Agricultural Perishables*. Miscellaneous Publication No. 585, 1946.

US Department of Commerce. Bureau of the Census. *United States Census of Business, 1948, Volume IV, Wholesale Trade—General Statistics, Commodity Line Sales Statistics*. Washington, DC, 1952.

US Department of Commerce and Labor, Bureau of Manufactures. *Municipal Markets and Slaughterhouses in Europe*. Special Consular Reports, vol. 42, part 3. Washington, DC, 1910.

US Department of the Interior, Fish and Wildlife Service. *Distribution of Marketing of Frozen Fishery Products*. Refrigeration of Fish—Part 5, Fishery Leaflet No. 431. Washington, DC, October 1956.

US Department of the Interior, National Park Service. “Historic and Architectural Resources of the Lower Prospect / Huron District of Cleveland, Ohio.” National Register of Historic Places Multiple Property Documentation Form, February 3, 1993.

US Federal Trade Commission. *Annual Report of the Federal Trade Commission for the Fiscal Year Ended June 30, 1937*. Washington, DC, 1937.

———. *Food Investigation, Report of the Federal Trade Commission on the Wholesale Marketing of Food, June 30, 1919*. Washington, DC, 1920.

US House Committee on Agriculture. *Development and Improvement of Terminal Marketing Facilities: Hearings Before the United States House Committee on Agriculture, Eighty-First Congress, Second Session on H.R. 8320 (superseded by H.R. 9141), June 6–9, 1950*. Washington, DC: Government Printing Office, 1950.

———. *Development of Marketing Facilities, Hearings Before the Committee on Agriculture House of Representatives Eighty-Fourth Congress, First Session on H.R. 4054, May 19 and 20, 1955*. Washington, DC: Government Printing Office, 1955.

US House Committee on the District of Columbia. *Farmers’ Market Site: Hearings Before the Subcommittee on Parks and Playgrounds of the Committee on the District of Columbia*, 70th Congress, 1st Session, 1928.

———. *Farmers’ Produce Market in the District of Columbia*, 70th Congress, 1st Session, Document No. 119, December 16, 1927.

US Senate Committee on the District of Columbia. *Papers Relating to the Washington Market Company. . . .* 60th Congress, 1st Session, 1908, S. Doc. No. 495.

US Senate Committee on the District of Columbia, Charles Moore, ed. *Report of the Senate Park Commission: The Improvement of the Park System of the District of Columbia*, 57th Congress, 1st Session, Senate Report No. 166. Washington, DC, 1902.

US Senate Committee on Manufactures. *Report of Committee and Hearings Held Before the Committee on Manufactures Relative to Foods Held in Cold Storage*, 61st Congress, 3rd Session, Senate Report No. 1272. Washington, DC, 1911.

US Senate Committee on Public Buildings and Grounds. *A Bill to Incorporate the Washington Market Company*, 41st Congress, 2nd Session, February 3, 1870, H.R. 1084.

US Supreme Court. Hernández v. State of Texas (1954).

Wann, John L., et al. *Farmers' Produce Markets in the United States: Part 1—History and Description*. Washington, DC: USDA, PMA, 1948.

Warren, George F. *Regional Market Needs in New York State: Report of a Committee Appointed at the Request of Governor Franklin D. Roosevelt by the New York State Conference of Mayors to Study Food Distribution Problems in New York State*. Albany: New York State Department of Agriculture and Markets, 1930.

Washington, DC, Office of Planning. *Florida Avenue Market Study, Small Area Plan, Volume I*. Washington, DC, March, 2009.

Washington, DC, Office of Planning; EHT Traceries, Inc. *Florida Avenue Market Study*. Washington, DC, April 24, 2007.

Watts, Frederick. *Report of the Commissioner of Agriculture for the Year 1873*. Washington, DC: Government Printing Office, 1874.

Weaver, F. P. *A Survey of Some Public Produce Markets in Up-State New York*. Bulletin 525, Ithaca, NY: Cornell University Agricultural Experiment Station, June 1931.

Wiser, Vivian, comp. *Preliminary Inventory of the Records of the Bureau of Agricultural Economics (Record Group 83)*. Washington, DC: National Archives, National Archives and Records Service, General Services Administration, 1958.

Articles in Magazines and Popular Journals

Ball, Charles B. "'What of the City,' Chicago: Vision—Planning—Promotion—Realization." *City Planning* 2, no. 1 (January 1926): 1–18.

"Baltimore's New Wholesale Market." *Inland Architect and News Record* 50 (September 1907): pl. fol. 36, 33.

"Branch, '12, Designs New Market Plans." *The M.A.C. Record*, Michigan Agricultural College Association 28, no. 9 (November 20, 1922): 12.

"Bringing the Railways and Its Freight Customer Together." *Electric Railway Journal* 50, no.1 (July 7, 1917): 6–7.

Carpenter, C. C., and I. B. Stafford. "Planning and Establishing a Municipal Market." *American City* 35 (December 1926): 841–43.

"'Change' Plagues Public Markets." *Nation's Business* 25 (October 1937): 37.

"Chicago: Feeding a City of Three Million People." *Popular Mechanics* 45, no. 1 (January 1926): 75–79.

"Cities Plan Terminal Markets." *Business Week*, December 22, 1945, 76, 78.

Conley, Charles E. "New Market District and Food Terminal Will Reduce Congestion and Facilitate Handling Perishable Foods." *American City* 41 (July 1929): 93–94.

“Containers at the Crossroads.” *Consumers’ Guide* 12 (March 1946): 12–14.

“Cost of Living.” *The Nation* 90, no. 2326 (January 27, 1910): 78.

Crouch, Harry E. “Developing a New Type of City Market.” *Cornell Countryman* 24, no. 6 (March 1927): 161, 163, 172.

———. “New Regional Market Dedicated at Buffalo, N.Y.” *American City* 44 (June 1931): 92–93.

Day, J. C. “New York Market Department Reorganized.” *American City* 20 (March 1919): 245–46.

“Detroit’s New Market Building.” *Market Growers Journal* 31, no. 6 (September 15, 1922): 9.

“Easing the Bellyache.” *Newsweek* (January 19, 1959): 30.

Eisenpreis, Alfred. “Hunts Point—Dramatic Expansion.” *Bronxboro Spring Edition* 51 (1974): 3–23.

“Erie and Nickel Plate Develop Large Produce Terminal at Buffalo, N.Y.” *Railway Age* 92, no. 20 (January–June 1932): 814–17.

“Fire Resistive Construction.” *Insurance Engineering* 9, no. 4 (April 1905): 376.

“Food Manufacturing Complex of Hunts Point Food Center Opens $12,000,000 Food Processing Plant,” *Bronxboro Summer Edition* 49 (1972): 3.

French, R. S. “Urges Package Standardization.” *Express Gazette Journal* 46, no. 11 (November 1921): 350.

Godfrey, Hollis. “The Food of the City Worker.” *Atlantic Monthly* 103 (February 1909): 272–75.

Grad, Frank, and George Hooper. “The New Centre Market, Newark, N.J.” *American Architect* 125, no. 2467 (March 11, 1925): 241–44.

Hegel, G. W. “The Los Angeles Produce Terminal.” *Concrete Highways and Public Improvements* 12 (April 1928): 82–83.

Horr, George E. “The Bronx Terminal Market.” *Architectural Concrete* 2, no. 1 (1936): 36–39.

“How Des Moines Solved the High Cost of Living: A Public Market on the City Hall Lawn Soon Lowered Extortionate Prices to a Rational Basis.” *Civic Progress* 3, no. 2 (1912): 1–2.

“How Los Angeles Handles Its Wholesale Produce Market.” *Motor Age* 37 (February 26, 1920): 33.

“How to Feed a Metropolis [New York City].” *Business Week* (July 21, 1945): 88.

“Hunts Point Cooperative Market.” *Bronxboro Summer Edition* 48 (1971): 5.

“Hunts Point: A Giant Step Forward for the Bronx—The City, and the Nation.” *Bronxboro Summer Edition* 45 (1967): 5, 24–28.

“Improper Land Use, Not Taxation, Held Cause of New York’s Blight.” *Architectural Record* 96, no. 2 (August 1944): 148–50.

“Les Halles Pooh-Poohs Reform.” *Business Week* (January 24, 1959): 30–31.

Maddox, Gaynor. “Filthy, Inefficient Wholesale Markets Pad Your Food Bill.” *Readers’ Digest* 69 (November 1956): 181–82.

Masciarelli, Anthony. “New Hunts Point Market.” *Bronxboro 66th Anniversary Edition* (1960): 13, 45–49.

Mowry, Don E. “Municipal Markets: An Economic Necessity.” *Government* 2 (1907): 177–82.

"The New Metropolitan Market." *American Agriculturist* 48, no. 3 (March 1889): 105, 107.

"New Plant of the Galveston Ice and Cold Storage Co." *Refrigerating World* 46, no. 3 (September 1913): 40–41.

"The New Quincy Market Plant." *Ice and Refrigeration* 30, no. 2 (February 1, 1906): 46.

"Niagara Frontier Food Terminal in Buffalo, New York." *Architectural Record* (November 1933): 342–44.

"Nubbins." *Consumers' Guide* 3, no. 24 (January 25, 1937), 19–20.

"Pennsylvania Railroad: 9 Acres of Fruits and Vegetables in the Heart of New York." *Nation's Business* 17, no. 2 (February 1929): 87.

"Pennsylvania Railroad Opens World's Largest Produce Terminal in New York." *Long Island Railroad Information Bulletin* 5, no. 3 (December 1927): 48–51.

Porter, Eugene H. "National Economic Problems." *Foods and Markets* 2, no. 18 (February 1920): 8.

———. "Problems of Food Distribution." *Foods and Markets* 3, nos. 25–26 (September–October 1920): 14–15.

"Portland Public Market." *Architectural Concrete* 2, no. 1 (1936): 34–35.

"Produce Mart Gets Elbow Room." *Business Week* (June 15, 1957): 61–62.

"Produce Plight." *Business Week* (June 10, 1950): 82.

"Providence Market News Service." *Market Growers Journal* 21 (August 15, 1917): 6.

"Public Markets as a Problem of the Farmer and His City Cousin: Modern Wholesale Regional Markets Advocated by Mayors' Conference Committee." *American City* 42 (March 1930): 117–18.

"Quincy Market Cold Storage Warehouse, Boston, W. G. Preston, Architect." *American Architect and Building News* 12 (August 26, 1882): 98, pl. 348.

Rathbun, Morris M. "The Los Angeles Wholesale Terminal Market." *American City* 19 (July 1918): 59.

"Riding a Cabbage Back to the Farm." *Consumers' Guide* 3, no. 4 (July 27, 1936): 3–6, 22.

Sherman, Caroline B. "Is a Public Market a Good Investment for a City?" *American City* 39 (September 1928): 131–34.

———."The Legal Basis of the Marketing Work of the United States Department of Agriculture." *Agricultural History* 11, no. 4 (October 1937): 289–301.

———. "A New Look for the Market Place." *American City* 63 (March 1948): 102, 117.

———. "Terminal Wholesale Produce Markets." *American City* 49 (July 1934): 46–47.

Sherman, Wells. "The Wholesale Produce Market." *Architectural Record* 76, no. 3 (September 1934): 199–203.

"Speed Record on Construction of Union Produce Terminal." *Nation's Business* (August 1929): 141.

Stier, Emile V., and James B. Keeling. "A Treatise on the Famous French Market in New Orleans, Louisiana." Booklet. New Orleans: French Market Corporation, 1938.

Talbot, C. H. "Kansas Municipal Notes." *American Municipalities* 26, no. 5 (February 1914): 174.

Waterbury, L. A. "Market and Warehouses Form Large Building Group." *Engineering News Record* 80, no. 4 (January 24, 1918): 167–68.

Watson, Wilbur J. “Cleveland’s Cooperative Food Terminal: Nickel Plate Railroad Builds Facilities for Local Commission Merchants.” *Civil Engineering* 2, no. 6 (1932): 364–67.

Weld, Louis Dwight. “High Food Prices, Middlemen, and Speculation.” *North American Review* 206, no. 743 (October 1917): 586–94.

“Where Facts Come First.” *Consumers’ Guide* 3, no. 11 (June 15, 1936): 3–5.

“Where the Trouble Lies: Conclusions of the Commissions Investigating High Cost of Living.” *Housewives League Magazine* 1, no. 1 (January 1913): 17–19.

“Wholesale Terminal Markets in New York.” *Real Estate Record and Builder’s Guide* (May 18, 1912): 1034.

Other Sources

Abel, Martin E. “Frederick V. Waugh: A Profile of Relevance.” *Choices*. A Publication of the Agricultural and Applied Economics Association (Fourth Quarter 1988): 42–44.

Adams, Nicholas. *Skidmore, Owings & Merrill: SOM since 1936*. London: Phaidon, 2007.

Adde, Leo. *Nine Cities: The Anatomy of Downtown Renewal: A Retrospective Review of Nine Cities in Which Panel Studies Were Made*. Washington, DC: Urban Land Institute, 1969.

Aldrich, Mark. “Tariffs and Trusts, Profiteers and Middlemen: Popular Explanations for the High Cost of Living, 1897–1920.” *History of Political Economy* 45, no. 4 (2013): 693–746.

Alvarez Jr., Robert R. *Mangos, Chiles, and Truckers: The Business of Transnationalism*. Minneapolis: University of Minnesota Press, 2005.

American Society of Planning Officials. *Wholesale Produce Markets*. Information Report No. 70. Chicago, 1955.

Ammon, Francesca Russello. *Bulldozer: Demolition and Clearance of the Postwar Landscape*. New Haven, CT: Yale University Press, 2016.

———. “Commemoration amid Criticism: The Mixed Legacy of Urban Renewal in Southwest Washington, DC.” *Journal of Planning History* 8, no. 3 (August 2009): 175–220.

Atherton, Lewis E. *The Frontier Merchant in Mid-America*. Columbia: University of Missouri Press, 1971.

———. “The Services of the Frontier Merchant.” *Mississippi Valley Historical Review* 4, no. 2 (September 1937): 153–70.

———. *The Southern Country Store, 1800-1860*. 1949. Reprint, New York: Greenwood Press, 1968.

Bacon, Mardges. “Rockefeller Center: Modernist Paradigm for the Urban Core.” In *Modernism and Landscape Architecture, 1890–1940*, Studies in the History of Art, vol. 78, edited by Therese O’Malley and Joachim Wolschke-Bulmahn, 279–306. Washington, DC: National Gallery of Art, 2015.

Baics, Gergely. *Feeding Gotham: The Political Economy and Geography of Food in New York, 1790–1860*. Princeton, NJ: Princeton University Press, 2016.

Bailey, L. H. *The Country-Life Movement in the United States*. New York: Macmillan, 1911.

———. *RUS: A Register of the Rural Leadership in the United States and Canada*. Ithaca, NY, 1920.

Baker, Gladys L., and Wayne D. Rasmussen. “Economic Research in the Department of Agriculture: A Historical Perspective.” *Agricultural Economics Research* 27, nos. 3 and 4 (July–October 1975): 53–72.

Belasco, Warren, and Roger Horowitz, eds. *Food Chains: From Farmyard to Shopping Cart*. Philadelphia: University of Pennsylvania Press, 2009.

Bernstein, Michael A. *A Perilous Progress: Economists and Public Purpose in Twentieth-Century America*. Princeton, NJ: Princeton University Press, 2001.

Bestor, Theodore C. *Tsukiji: The Fish Market at the Center of the World*. Berkeley: University of California Press, 2004.

Black, Madeleine. *A Terminal Market System. New York’s Most Urgent Need. Some Observations, Comments and Comparisons of European Markets*. New York: Willett Press, 1912.

Bowers, Douglas E. “The Research and Marketing Act of 1946 and Its Effects on Agricultural Marketing Research.” *Agricultural History* 56, no. 1 (January 1982): 249–63.

Branch, G. V. *Detroit’s New Union Produce Terminal*. Paper given before the tenth annual convention of the National Association of Marketing Officials at the Congress Hotel, Chicago, December 3, 1928. Detroit, 1928.

Branch, G. V., and George E. Thierwechter. “Modern Wholesale Produce Terminal Facilities for the Larger Cities.” *Journal of the American Institute of Planners* 4, no. 1 (1938): 8–12.

Brand, Charles J. “The Office of Markets of the United States Department of Agriculture.” In *Reducing the Cost of Food Distribution*, edited by Clyde Lyndon King, 255–59. Annals of the American Academy of Political and Social Science, vol. 50. Philadelphia, 1913.

Branum, Tiffany. “Union Market: A Story of People and Food in a Changing Place.” Master’s thesis, University of Maryland–Baltimore County, 2014.

Brasfield, Kenneth H. “World’s Largest Market Joins the Jet Age.” In USDA, *Yearbook of Agriculture*, 130–34. Washington, DC, 1968.

Brinkley, Catherine, and Domenic Vitiello. “From Farm to Nuisance: Animal Agriculture and the Rise of Planning Regulation.” *Journal of Planning History* 13, no. 2 (May 2014): 113–35.

Butterworth, J. D. “The Chicago Wholesale Fresh Fruit and Vegetable Market.” *Journal of Marketing* 17, no. 3 (January 1953): 291–94.

Cadilhon, Jean-Joseph, et al. “Wholesale Markets and Food Distribution in Europe: New Strategies for Old Functions.” Centre for Food Chain Research, Department of Agricultural Sciences, Imperial College London, Discussion Paper No. 2, January 2003.

Carpenter, Daniel P. *The Forging of Bureaucratic Autonomy: Reputation, Networks, and Policy Innovation in Executive Agencies, 1862–1928*. Princeton, NJ: Princeton University Press, 2001.

Centre Market Merchants’ Association. *Official Souvenir Book of the Opening of the New Centre Market, Newark, New Jersey*. Newark, NJ: Colyer Printing, 1924.

Chandler, Alfred D. *The Visible Hand: The Managerial Revolution in American Business*. Cambridge, MA: Belknap Press of Harvard University Press, 1977.

Chiarappa, Michael J. "New York City's Oyster Barges: Architecture's Threshold Role along the Urban Waterfront." *Buildings and Landscapes* 14 (Fall 2007): 84–108.

Childs, William R. *Trucking and the Public Interest: The Emergence of Federal Regulation, 1914–1940*. Knoxville: University of Tennessee Press, 1985.

Civic League of St. Louis. *Public Markets in St. Louis; A Study in Reducing the Cost of Living . . . What St. Louis Has to-Day; What Has Been Done to Improve Our Markets;—and What Should Be Done*. St. Louis: Civic League of St. Louis, 1914.

Cohen, Lizabeth. *Making a New Deal: Industrial Workers in Chicago, 1919–1939*. New York: Cambridge University Press, 1990.

Coleman, Margaret Marshall. *Mama Wears Two Aprons: Women in Farming and Farm Marketing*. Exeter, NH: Publishing Works, 2008.

Collins, J. H. "Various Types of Wholesale Traders." In *Agricultural Economics*, edited by Edwin Nourse, 524–30. 1916. Fourth printing. Chicago: University of Chicago Press, 1920.

Cooper, Constance J. *To Market, to Market, in Wilmington: King Street and Beyond*. Wilmington, DE: Cedar Tree Press, 1992.

Cronon, William. *Nature's Metropolis: Chicago and the Great West*. New York: W. W. Norton, 1991.

Crook, Mary Charlotte. "The Montgomery Farm Women's Cooperative Market." *Montgomery County Story* 25, no. 3 (August 1982): 1–8.

Crouch, Harry E. *The Public Markets of Buffalo, N.Y. (1927)*. [n.p., 1927].

Croushorn, Ronald L. "Impact of a Food Distribution Center on Produce Handling and Distribution." *Journal of Food Distribution Research* (February 1990): 93–100.

Crow, William C. "Changes in Marketing Facilities." In *Yearbook of Agriculture, 1960*, 281–86. Washington, DC, 1960.

———. "Exhibit at Paris." *USDA Employee News Bulletin* (March 15, 1961): 3.

———. "Improving the Competitive Position of Fresh Fruit and Vegetable Wholesalers." In *Yearbook of the United Fresh Fruit and Vegetable Association*, 137–40. Washington, DC, 1947.

———. "Industry Cooperation in Marketing Facilities Studies." *Journal of Farm Economics* 37, no. 5 (December 1955): 1215–18.

———. "The Need for Better Marketing Facilities." *Fatis: International Review of Agricultural Development* 13, no. 1 (1966): 7–8.

———. "Produce Market Districts." In *Better Cities . . . Better Business: A Complete Report on the Businessmen's Conference on Urban Problems, Detroit, Michigan, September 13 and 14, 1948*, 68–70. Washington, DC: Chamber of Commerce of the United States, 1948.

———. "Putting More Go-Go in Cargo—Containers and World Trade." In USDA, *The Yearbook of Agriculture 1968, Science for Better Living*, 240–47. 90th Congress, 2nd session, House Doc. 239. Washington, DC: Government Printing Office, 1968.

Danes-Wingett, Linda. "The Ice Car Cometh: A History of the Railroad Refrigerator Car." *San Joaquin Historian* 10, no. 4 (Winter 1996): 1–9.

Davidson, Janet F., and Michael S. Sweeney. *On the Move: Transportation and the American Story*. Washington, DC: National Geographic, 2003.

Davis, Howard. *Living over the Store: Architecture and Local Urban Life*. New York: Routledge, 2012.

Deupree, Robert G. *The Wholesale Marketing of Fruits and Vegetables in Baltimore*. Johns Hopkins University Studies in Historical and Political Science, Series 57, no. 2. Baltimore: Johns Hopkins University Press, 1939.

Deutsch, Tracey. *Building a Housewife's Paradise: Gender, Politics, and American Grocery Stores in the Twentieth Century*. Chapel Hill: University of North Carolina Press, 2010.

De Voe, Thomas F. *The Market Assistant, Containing Every Article of Human Food Sold in the Public Markets of the Cities of New York, Boston, Philadelphia, and Brooklyn*. 1867. Reprint, New York: Riverside Press, 1967.

———. *The Market Book: Containing a Historical Account of the Public Markets of the Cities of New York, Boston, Philadelphia and Brooklyn*. 1862. Reprint, New York: Augustus M. Kelley, 1970.

———. *Report upon the Present Condition of the Public Markets of the City and County of New York*. New York, 1873.

Doig, Jameson W. *Empire on the Hudson: Entrepreneurial Vision and Political Power at the Port of New York Authority*. New York: Columbia University Press, 2001.

Dolkart, Andrew. *The Row House Reborn: Architecture and Neighborhoods in New York City, 1908-1929*. Baltimore: Johns Hopkins University Press, 2009.

Donofrio, Gregory. "Attacking Distribution: Obsolescence and Efficiency of Food Markets in the Age of Urban Renewal." *Journal of Planning History* 13, no. 2 (May 2014): 136–59.

———. "'The Container and the Contained': The Functional Preservation of Historic Food Markets." PhD diss., Cornell University, 2009.

———. "Feeding the City." *Gastronomica: The Journal of Food and Culture* 7, no. 4 (Fall 2007): 30–41.

Downing, Fred P. "Round Stave Shipping Baskets: Necessity for Standardization." *Western Fruit Jobber* 6, no. 3 (July 1919): 15–20.

Draper, Joan E. "Planning Wacker Drive." In *Streets: Critical Perspectives in Public Space*, edited by Zeynep Celik, Diane Favro, and Richard Ingersole, 259–76. Berkeley: University of California Press, 1994.

Eisenhour, Virginia. *The Strand of Galveston*. Galveston: self-published, 1974.

Estabrook, Barry. *Tomatoland: How Modern Industrial Agriculture Destroyed Our Most Alluring Fruit*. Kansas City, MO: Andrews McMeel Publishing, 2011.

Farmer, Charles J. *In the Absence of Towns: Settlement and Country Trade in Southside Virginia, 1730-1800*. Lanham, MD: Rowman and Littlefield, 1993.

Federal Writers' Project (IL) and Henry Horner, Governor. *Illinois: A Descriptive and Historical Guide*. American Guide Series. Chicago: A. C. McClurg, 1939.

Federal Writers' Project (MI) and Michigan State Administrative Board. *Michigan: A Guide to the Wolverine State*. American Guide Series. New York: Oxford University Press, 1941.

Federal Writers' Project (NY) and New York State Historical Association. *New York: A Guide to the Empire State*. American Guide Series. New York: Oxford University Press, 1940.

Federal Writers' Project (PA) and Pennsylvania Historical Commission. *Philadelphia: A Guide to the Nation's Birthplace*. American Guide Series. Philadelphia, PA: William Penn Association of Philadelphia, 1937.

Fetters, Thomas T. *The Lustron Home: The History of a Postwar Prefabricated Housing Experiment*. Jefferson, NC: McFarland, 2002.

Finstein, Amy Debra. "Lofty Visions: The Architectural Intentions and Contrary Realities of Elevated Urban Highways in America, 1900–1959." PhD diss., University of Virginia, 2009.

Fitzgerald, Deborah. "Accounting for Change: Farmers and the Modernizing State." In *The Countryside in the Age of the Modern State: Political Histories of Rural America*, edited by Catherine McNicol Stock and Robert D. Johnston, 193–99. Ithaca, NY: Cornell University Press, 2001.

———. *Every Farm a Factory: The Industrial Ideal in American Agriculture*. New Haven, CT: Yale University Press, 2003.

Fitzgerald, Gerard J., and Gabriella M. Petrick. "In Good Taste: Rethinking American History with Our Palates." *Journal of American History* 95, no. 2 (2008): 392–404.

Fogelson, Robert W. *Downtown: Its Rise and Fall, 1880–1950*. New Haven, CT: Yale University Press, 2001.

Frank, Dana. "Housewives, Socialists, and the Politics of Food: The 1917 New York Cost-of-Living Protests." *Feminist Studies* 11, no. 2 (Summer 1985): 255–85.

Freeman, Roland L. *The Arabbers of Baltimore*. Centreville, MD: Tidewater Publishers, 1989.

Freidberg, Susanne. *Fresh: A Perishable History*. Cambridge, MA: Belknap Press of Harvard University Press, 2009.

———. "The Triumph of the Egg." *Comparative Studies in Society and History* 50, no. 2 (April 2008): 400–423.

Frieburger, William. "War, Prosperity, and Hunger: The New York Food Riots of 1917." *Labor History* 25, no. 2 (Spring 1984): 217–39.

Friedman, Edwin. "A Planning Study of Lower Manhattan." Master's thesis, Columbia University, School of Architecture, 1958.

Gallagher, John J. "Bush Terminal." In *The Encyclopedia of New York City*, edited by Kenneth T. Jackson, 171. New Haven, CT: Yale University Press, 1995.

Garcia, Matt. "Setting the Table: Historians, Popular Writers, and Food History." *Journal of American History* 103, no. 3 (December 2016): 656–78.

Gerhard, William Paul. *Sanitation of Public Buildings*. New York: Wiley, 1907.

Gerstle, Gary. *Liberty and Coercion: The Paradox of American Government from the Founding to the Present*. Princeton, NJ: Princeton University Press, 2015.

Gilbert, Jess. "Agrarian Intellectuals in a Democratizing State: A Collective Biography of USDA Leaders in the Intended New Deal." In *The Countryside in the Age of the Modern State: Political Histories of Rural America*, edited by Catherine McNicol Stock and Robert D. Johnston, 226–30. Ithaca, NY: Cornell University Press, 2001.

Gilbert, Jess, and Ellen Baker. "Wisconsin Economists and New Deal Agricultural Policy: The Legacy of Progressive Professors." *Wisconsin Magazine of History* 80, no. 4 (Summer 1997): 280–312.

Gilbert, Jess, and Alice O'Connor. "Leaving the Land Behind: Struggles for Land Reform in US Federal Policy, 1933–1965." In *Who Owns America? Social Conflict over Property Rights*, edited by Harvey M. Jacobs, 114–30. Madison: University of Wisconsin Press, 1998.

Goodwin, Arthur E. *Markets: Public and Private*. Seattle: Montgomery Printing, 1929.

Graddy, Kathryn. "Markets: The Fulton Fish Market." *Journal of Economic Perspectives* 20, no. 2 (Spring 2006): 207–20.

Greene, Ann Norton. *Horses at Work: Harnessing Power in Industrial America*. Cambridge, MA: Harvard University Press, 2008.

Gritzan, Robert Francis. "Market Facilities in Baltimore in Relation to Needs of Retail Grocers." Master's thesis, University of Maryland, 1946.

Guàrdia, Manuel, and José Luis Oyón, eds. *Making Cities through Market Halls: Europe, 19th and 20th Centuries*. English ed. Barcelona: Ajuntament de Barcelona, Institut de Cultura, Museu d'Historòria de Barcelona, 2015.

Hales, Peter Bacon. *Silver Cities: Photographing American Urbanization, 1839–1939*. Albuquerque: University of New Mexico Press, 2005.

Hall, E. H., comp. *The Chicago City Directory, and Business Advertiser*. 4th ed. Chicago: Robert Fergus, 1855.

Hamilton, Shane. "Agribusiness, the Family Farm, and the Politics of Technological Determinism in the Post–World War II United States." *Technology and Culture* 55, no. 3 (July 2014): 560–90.

———. "Long-Haul Trucking and the Technopolitics of Industrial Agriculture, 1945–1975." In *The Technological Fix: How People Use Technology to Create and Solve Problems*, edited by Lisa Rosner, 93–117. Hagley Perspectives on Business and Culture. New York: Routledge, 2004.

———. *Trucking Country: The Road to America's Wal-Mart Economy*. Princeton, NJ: Princeton University Press, 2008.

Hayward, Mary Ellen, and Charles Belfoure. *The Baltimore Rowhouse*. New York: Princeton Architectural Press, 1999.

Hayward, Mary Ellen, and Frank R. Shivers Jr., eds. *The Architecture of Baltimore: An Illustrated History*. Baltimore: Johns Hopkins University Press, 2004.

Hedden, Walter P. *How Great Cities Are Fed*. Boston: D. C. Heath, 1929.

———. *Mission: Port Development: With Case Studies*. Washington, DC: American Association of Port Authorities, 1967.

———. *Produce Terminal Requirements in the New York Area*. New York: Port of New York Authority; USDA, Bureau of Agricultural Economics, 1925.

———. "Some Results of Terminal Market Studies." In *Cooperative Marketing and City Marketing Problems*, 42–46. Proceedings of the National Association of State Marketing Officials. Fifth Annual Meeting. Chicago, 1923.

Henshaw, Fred W. *Produce Terminals and the Cost of Living: A Study of Detroit's Problem of Marketing Perishable Foodstuffs; and of the Avenues to Economy Found by Other Cities*. Detroit: Evening News Association, 1928.

Hess, Jerry N. "Oral History Interview with Dr. Edwin G. Nourse." Washington, DC, March 7, 1972. Typescript, Harry S. Truman Library and Museum.

Hise, Greg. "Nature's Workshop: Industry and Urban Expansion in Southern California, 1900–1950." *Journal of Historical Geography* 27, no. 1 (2001): 74–92.

Historic American Buildings Survey (HABS). “Documentation of the Bronx Terminal Market.” Unpublished report prepared by AKRF, Inc., July 2006.

Ho, Szu-han, and Jess Vogler. “Butter in the Mail: Experiments in the Epistolary Economy.” In *On Farming*, edited by Mason White and Maya Przybylski, 25–28. Barcelona: Actar, 2010.

Hodder, Robert. “Savannah’s Changing Past: Historic Preservation Planning and the Social Construction of a Historic Landscape.” In *Planning the Twentieth-Century American City*, edited by Mary Corbin Sies and Christopher Silver, 361–82. Baltimore: Johns Hopkins University Press, 1996.

Hodges, Graham Russell. *New York City Cartmen, 1667–1850*. New York: New York University Press, 1986.

Horowitz, Roger. *Putting Meat on the American Table: Taste, Technology, Transformation*. Baltimore: Johns Hopkins University Press, 2005.

Horowitz, Roger, Jeffrey M. Pilcher, and Sydney Watts. “Meat for the Multitudes: Market Culture in Paris, New York City, and Mexico City over the Long Nineteenth Century.” *American Historical Review* 109, no. 4 (October 2004): 1055–82.

Houck, James P. “Sound Judgment and Common Sense: The Professional Legacy of Fred Waugh.” *American Journal of Agricultural Economics* 73, no. 5 (December 1991): 1330–33.

Houck, James P., and Martin E. Abel, eds. *Selected Writings on Agricultural Policy and Economic Analysis by Frederick V. Waugh*. Minneapolis: University of Minnesota Press, 1984.

“Houston Produce Terminal.” Special Section. *Houston Post*, November 5, 1954.

“How to Feed 10 Million Mouths [New York].” *Review of Marketing and Agricultural Economics* [Australia] 15, no. 8 (August 1947): 289–93.

Humphries, Lance. “Baltimore and the City Beautiful: Carrère and Hastings Reshapes an American City.” In *Modernism and Landscape Architecture, 1890–1940*. Studies in the History of Art, vol. 78, edited by Therese O’Malley and Joachim Wolschke-Bulmahn, 247–78. Washington, DC: National Gallery of Art, 2015.

Imbert, Dorothée, ed. *Food and the City: Histories of Culture and Cultivation*. Dumbarton Oaks Colloquium on the History of Landscape Architecture XXXVI. Washington, DC: Dumbarton Oaks, 2015.

Ingersoll, Ernest. *The Oyster Industry*. Washington, DC: Government Printing Office, 1881.

Institut Municipal de Mercats de Barcelona. *Urban Markets: Heart, Soul, and Motor of Cities: Making City Markets the Drivers of Sustainable Urban Developmen*t. City of Barcelona, March 2015.

Jackier, Diane Alyssa. “Moving Historic Structures: The Washington Street Urban Renewal Project.” Master’s thesis, University of Pennsylvania, 2001.

Johannesen, Eric. *Cleveland Architecture, 1876–1976*. Cleveland: Western Reserve Historical Society, 1979.

John, Richard R. *Network Nation: Inventing American Telecommunications*. Cambridge, MA: Harvard University Press, 2010.

Johnson, Kimberley S. *Governing the American State: Congress and the New Federalism, 1877–1929*. Princeton, NJ: Princeton University Press, 2007.

Jumper, Sidney R. “Wholesale Marketing of Fresh Vegetables.” *Annals of the Association of American Geographers* 64, no. 3 (September 1974): 387–96.

Jung, Hyun Tae. “Organization and Abstraction: The Architecture of Skidmore, Owings & Merrill from 1936 to 1956.” PhD diss., Columbia University, 2011.

Kinchin, Juliet. “Little Farms Unit: Nature, Ecology, and Community.” In *Frank Lloyd Wright: Unpacking the Archive*, edited by Barry Bergdoll and Jennifer Gray, 42–59. New York: Museum of Modern Art, 2017.

King, Charles Glen. *Henry Clapp Sherman 1875–1955: A Biographical Memoir.* Washington, DC: National Academy of Sciences, 1975.

King, Clyde Lyndon. “Can the Cost of Distributing Food Products Be Reduced?” *Annals of the American Academy of Political and Social Science* 48. The Cost of Living (July 1913): 199–224.

——. “Municipal Markets.” In *Reducing the Cost of Food Distribution*, edited by Clyde Lyndon King, 102–17. Annals of the American Academy of Political and Social Science, vol. 50. Philadelphia, 1913.

——. *Public Markets in the United States: Second Report of a Committee of the National Municipal League*. Philadelphia: National Municipal League, 1917.

——, ed. *Reducing the Cost of Food Distribution*. Annals, vol. 50. American Academy of Political and Social Science, Philadelphia, 1913.

——. “Review of *Markets for the People: The Consumer’s Part*, by J. W. Sullivan.” In *State Regulation of Public Utilities*, edited by Emory R. Johnson, 341–42. Annals of the American Academy of Political and Social Science, vol. 53. Philadelphia, 1914.

——. *A Study of Trolley Light Freight Service and Philadelphia Markets in their Bearing on the Cost of Farm Produce*. Made under the direction of Rudolph Blankenburg, Mayor. Philadelphia, October 1912.

King, Richard A. “Review of Selected Writings on Agricultural Policy and Economic Analysis by Frederick V. Waugh: James P. Houck and Martin E. Abel.” *American Journal of Agricultural Economics* 67, no. 1 (February 1985): 176–78.

Kling, Samuel. “Wide Boulevards, Narrow Visions: Burnham’s Street System and the Chicago Plan Commission, 1909–1930.” *Journal of Planning History* 12, no. 3 (August 2013): 245–68.

Knapp, Joseph Grant. *Edwin G. Nourse, Economist for the People*. Danville, IL: Interstate Printers and Publishers, 1979.

Koeppel, Dan. *Banana: The Fate of the Fruit That Changed the World*. New York: Hudson Street Press, 2008.

Kohler, Sue, and Pamela Scott, eds. *Designing the Nation’s Capital: The 1901 Plan for Washington, DC*. Washington, DC: US Commission of Fine Arts, 2006.

Kurlansky, Mark. *The Big Oyster: History on the Half Shell*. New York: Ballantine Books, 2006.

——. *Cod: A Biography of the Fish That Changed the World*. New York: Walker and Co., 1997.

——. *Salt: A World History*. New York: Walker and Co., 2002.

La Guardia, Fiorello. *New York Advancing: A Scientific Approach to Municipal Government, 1934–1935*. New York: Municipal Reference Library, 1936.

Larry Remele, "'Things as They Should Be': Jeffersonian Idealism and Rural Rebellion in Minnesota and North Dakota 1910–1920," *Minnesota History* 51, no. 1 (Spring 1988): 15–22.

Larson, Olaf F., and Julie N. Zimmerman. *Sociology in Government: The Galpin-Taylor Years in the US Department of Agriculture 1919–1953*. University Park: Pennsylvania State University Press, 2003.

Leach, William. *Land of Desire: Merchants, Power, and the Rise of a New American Culture*. New York: Pantheon Books, 1993.

Levinson, Marc. *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger*. Princeton, NJ: Princeton University Press, 2006.

———. *The Great A&P and the Struggle for Small Business in America*. New York: Hill and Wang, 2011.

Linder, Marc, and Lawrence Zacharias. *Of Cabbages and Kings County: Agriculture and the Formation of Modern Brooklyn*. Iowa City: University of Iowa Press, 1999.

Lohmeier, Andrew. "'Bürgerliche Gesellschaft' and Consumer Interests: The Berlin Public Market Hall Reform 1867–1891." *Business History Review* 73, no. 1 (Spring 1999): 91–113.

Longstreth, Richard. "Brave New World: Southwest Washington and the Promise of Urban Renewal." In *Housing Washington: Two Centuries of Residential Development and Planning in the National Capital Area*, edited by Richard Longstreth, 255–80. Chicago: Center for American Places at Columbia College Chicago, 2010.

———. *The Buildings of Main Street: A Guide to American Commercial Architecture*. Washington, DC: National Trust for Historic Preservation, Preservation Press, 1987.

———. *The Drive-in, the Supermarket, and the Transformation of Commercial Space in Los Angeles, 1914–1941*. Cambridge, MA: MIT Press, 1999.

"Louis Dwight Harvell Weld." In *The Encyclopedia of the History of American Management*, edited by Morgen Witzel, 539–40. Bristol, England: Thoemmes, 2005.

Magoon, Charles E. *Photos at the Archives: A Descriptive Listing of 800 Historic Photographs on Food Marketing at the National Archives*. Santa Barbara, CA: McNally and Loftin, West, 1981.

———. *The Way It Was: The Produce Industry in the Early Years, 1890 to 1930: An Illustrated History*. Berkeley Springs, WV: Particularly Produce, 1997.

Mainzer, Lewis. "Science in a Political Context: The Agricultural Marketing Act of 1946." PhD diss., University of Chicago, 1957.

Markham, Jerry W. *Law Enforcement and the History of Financial Market Manipulation*. Armonk, NY: M. E. Sharpe, 2014.

Mayo, James M. *The American Grocery Store: The Business Evolution of an Architectural Space*. Westport, CT: Greenwood Press, 1993.

McCorkle Jr., James L. "Moving Perishables to Market: Southern Railroads and the Nineteenth-Century Origins of Southern Truck Farming." *Agricultural History* 66, no. 1 (Winter 1992): 42–62.

McDean, Harry C. "Professionalism, Policy, and Farm Economics in the Early Bureau of Agricultural Economics." *Agricultural History* 57, no. 1 (January 1983): 64–82.

McElheny Jr., Victor K. *Analysis of the Joint Report on Foods and Markets of Governor Whitman's Market Commission and Others* . . . New York: Fruit Auction Company, [1917].

McShane, Clay, and Joel A. Tarr. *The Horse in the City: Living Machines in the Nineteenth Century*. Baltimore: Johns Hopkins University Press, 2007.

Mead, Christopher Curtis. *Making Modern Paris: Victor Baltard's Central Markets and the Urban Practice of Architecture*. University Park: Pennsylvania State University, 2012.

Miller, Carol Poh. "Markets and Market Houses." *Encyclopedia of Cleveland History*. Case Western Reserve University, http://ech.cwru.edu/.

Miller, Cyrus Chace. *Municipal Market Policy*. New York: City Club of New York, 1912.

——. *Terminal Markets in the United States: A Plan to Bring About the Systematic and Economical Distribution of Food in Our Cities* [reprinted from the Housewives League Magazine, Jan. 1913], in SER p.v.37, Pamphlets, no. 19, New York Public Library.

——. *What the City Can Do to Reduce the Cost of Living, an Address Delivered at Binghamton, N.Y., on June 6, 1913, Before the Conference of Mayors and Other City Officials of the State of New York*, in SER p.v.41, New York Public Library.

Miller, Montserrat. *Feeding Barcelona, 1714–1975: Public Market Halls, Social Networks, and Consumer Culture*. Baton Rouge: Louisiana State University Press, 2015.

Ministry of Finance and Economic Affairs, Ministry of Agriculture, Food and Agriculture Organization, Organisation for Economic Co-operation and Development. *Le Ravitaillement des Grandes Villes*. Centre National des Expositions et Concours Agricoles. Colloque International, Paris, March 2–6, 1965. Conference brochure.

Mittendorf, Hans Joachim. *Planning of Urban Wholesale Markets for Perishable Food: With Particular Reference to Developing Countries*. Rome: Food and Agriculture Organization of the United Nations, 1976.

Moeckel, Bill Reid. *The Development of the Wholesaler in the United States, 1860–1900*. New York: Garland, 1986.

Moore, Charles. "Problems in the Development of Washington." *Journal of the American Institute of Architects* 5, no. 5 (May 1917): 213–32.

Municipal Art Society of New York. "Fulton Fish Market: New Market Building." Unpublished report, ca. 2008.

National League of Commission Merchants of the United States. *Twenty-Eighth Annual Convention of the National League of Commission Merchants of the United States*. Cleveland, OH, January 14–16, 1920.

"Necrology: Lloyd Stanley Tenny." *Proceedings of the Florida State Horticultural Society* 76 (1963): 484.

"New Golden Gate Food Terminal, San Francisco, California [ca. 1962]." Box 1, Folder 39, Charles E. Magoon collection on produce marketing (Accession 2016.214), Hagley Museum and Library.

Newlands, James. *A Short Description of the Markets and Market System of Paris, with Notes on the Markets of London*. Liverpool: G. McCorquodale, 1865.

Nichols, James E. “The Grocery Trade.” In *1795–1895: One Hundred Years of American Commerce*, vol. 1, edited by Chauncey M. Depew, 595–601. New York: D. O. Haynes, 1895.

Nielson, Howard Curtis. “The Wholesale Produce Market in New York City—Its Relocation or Modernization to Reduce Marketing Costs.” PhD diss., Stanford University, 1957.

Nourse, Edwin, ed. *Agricultural Economics: A Selection of Materials in Which Economic Principles Are Applied to the Practice of Agriculture*. 1916. Fourth printing, Chicago: University of Chicago Press, 1920.

———. *The Chicago Produce Market: The Study of Market Mechanism as a Factor in Price Determination*. Boston: Houghton Mifflin, 1918.

Novak, William J. *The People’s Welfare: Law and Regulation in Nineteenth-Century America*. Chapel Hill: University of North Carolina Press, 1996.

“Oakes Ames.” In *Encyclopedia Americana*, edited by George Edwin Rines, 569–70. New York: Encyclopedia Americana Corp., 1920.

O’Malley, Therese, and Joachim Wolschke-Bulmahn, eds. *Modernism and Landscape Architecture, 1890–1940*. Studies in the History of Art, vol. 78. Washington, DC: National Gallery of Art, 2015.

O’Neil, David K. *Reading Terminal Market: An Illustrated History*. Philadelphia: Camino Books, 2004.

O’Neil, Thomas P. “Philadelphia: Where Patience Is a Vice.” In *Our Fair City*, edited by Robert S. Allen, 59–67. New York: Vanguard, 1947.

Osman, Michael. “Preserved Assets.” In *Governing by Design: Architecture, Economy, and Politics in the Twentieth Century*,” 1–20. Aggregate. Architectural History Collaborative. Pittsburgh: University of Pittsburgh Press, 2012.

———. “Regulation, Architecture and Modernism in the United States, 1890–1920.” PhD diss., Massachusetts Institute of Technology, 2008.

Osthoff, Georg, and Eduard Schmitt. “Markthallen und Marktplätze.” In *Handbuch der Architektur*, edited by Josef Durm, vol. 4, pt. 3, 2, 194–273. Darmstadt: Arnold Bergsträsser 1883–1923.

Padoongpatt, Mark. “Sitting at the Table: Food History as American History.” *Journal of American History* 103, no. 3 (December 2016): 686–89.

Peatross, C. Ford, ed. *Capital Drawings: Architectural Drawings for Washington, DC, from the Library of Congress*. Baltimore: Johns Hopkins University Press, in association with the Library of Congress, 2005.

Phillips, Raymond G., with Samuel Fraser. *Wholesale Distribution of Fresh Fruits and Vegetables*. Rochester, NY: Joint Council of the National League of Commission Merchants of the United States, Western Fruit Jobbers’ Association of America, and International Apple Shippers’ Association, 1922.

Port of New York Authority. *Report on the Food Supply of the Port of New York District*. Albany, NY: Lyon, 1922.

Porter, Glenn, and Harold C. Livesay. *Merchants and Manufacturers: Studies in the Changing Structure of Nineteenth-Century Marketing*. Baltimore: Johns Hopkins University Press, 1971.

Price, H. Bruce. *The Marketing of Farm Products: Studies in the Organization of the Twin Cities Market*. Minneapolis: University of Minnesota Press, 1927.

Quincy Jr., John. *Quincy's Market: A Boston Landmark*. Boston: Northeastern University Press, 2003.

Radford, Gail. *The Rise of the Public Authority: Statebuilding and Economic Development in Twentieth-Century America*. Chicago: University of Chicago Press, 2013.

Randl, Chad. "The Use of Awnings on Historic Buildings: Repair, Replacement and New Design." *Preservation Briefs*. No. 44, National Park Service, US Department of the Interior, Washington, DC, April 2005.

Rasmussen, M. P. "The Motor Truck in Relation to Fruit and Vegetable Marketing." *Journal of Farm Economics* 18, no. 2 (May 1936): 372–84.

Rauchway, Eric. "The High Cost of Living in the Progressives' Economy." *Journal of American History* 88, no. 3 (December 2001): 898–924.

Reck, Franklin M. *Horses to Horsepower: A Study of the Effect of the Motor Truck on American Living*. Detroit: Automobile Manufacturers Association, 1947.

Reid, Robert L. *Picturing Texas: The FSA-OWI Photographers in the Lone Star State, 1935–1943*. Austin: Texas State Historical Association, 1994.

Reid, Robert L., and Larry A. Viskochil, eds. *Chicago and Downstate: Illinois as Seen by the Farm Security Administration Photographers, 1936–1943*. Chicago: Chicago Historical Society, 1989.

Risch, Theodor. *Bericht über Markthallen in Deutschland, Belgien, Frankreich, England und Italien*. Berlin: Wolf Peiser Verlag, 1867.

Robinson, Solon. *How to Live: Saving and Wasting, or Domestic Economy Illustrated*. New York: Fowler and Wells, 1860.

Rodgers, Daniel T. *Atlantic Crossings: Social Politics in a Progressive Age*. Cambridge, MA: Belknap Press of Harvard University Press, 1998.

Ross, Helen Patricia. "A History of Washington's Fish Market, 1865–1989." Master's thesis, George Washington University, 1989.

Ross, Rebecca. "Picturing the Profession: The View from Above and the Civic Imaginary in Burnham's Plans." *Journal of Planning History* 12, no. 3 (August 2013): 269–81.

Rubin, Jasper. *A Negotiated Landscape: The Transformation of San Francisco's Waterfront since 1950*. 2nd ed. Pittsburgh: University of Pittsburgh Press, 2016.

Runge, C. Ford. "Agricultural Economics: A Brief Intellectual History." Center for International Food and Agricultural Policy Working Paper WP06-1, University of Minnesota–St. Paul, June 2006.

Rutherford, Malcolm. *The Institutionalist Movement in American Economics, 1918–1947: Science and Social Control*. Cambridge, MA: Cambridge University Press, 2011.

Sandoval-Strausz, A. K. "Spaces of Commerce: A Historiographic Introduction to Certain Architectures of Capitalism." *Winterthur Portfolio* 44, no. 2/3 (Summer/Autumn 2010): 143–58.

Scardino, Barrie. *Clayton's Galveston: The Architecture of Nicholas J. Clayton and His Contemporaries*. College Station: Texas A&M University Press, 2000.

Schapsmeier, Edward L., and Frederick H. Schapsmeier. *Ezra Taft Benson and the Politics of Agriculture: The Eisenhower Years, 1953–1961*. Danville, IL: Interstate Printers and Publishers, 1975.

Schmiechen, James, and Kenneth Carls. *The British Market Hall: A Social and Architectural History*. New Haven, CT: Yale University Press, 1999.

Scott, Pamela, and Antoinette J. Lee. *Buildings of the District of Columbia*. New York: Oxford University Press, 1993.

Shaars, Marvin A. "The Story of the Department of Agricultural Economics 1909–1972." Madison: University of Wisconsin, 1972. Typescript.

Sherman, Wells Alvord. *Merchandising Fruits and Vegetables: A New Billion Dollar Industry*. Chicago: A. W. Shaw, 1928.

Shorett, Alice, and Murray Morgan. *The Pike Place Market: People, Politics, and Produce*. Seattle: Pacific Search Press, 1982.

Short, C. W., and R. Stanley-Brown. *Public Buildings: A Survey of Architecture of Projects Constructed by Federal and Other Governmental Bodies between the Years 1933 and 1939 with the Assistance of the Public Works Administration*. Washington, DC: Government Printing Office, 1939.

Sies, Mary Corbin, and Christopher Silver, eds. *Planning the Twentieth-Century American City*. Baltimore: Johns Hopkins University Press, 1999.

Slanetz, Priscilla Jennings. "A History of the Fulton Fish Market." *Log of Mystic Seaport* 28 (1986): 14–25.

Smith, Marie Elizabeth. *Bill's Story of the Wholesale Produce Market*. Social Learnings Readers. New York: Scribner's, 1951.

"The South Water Street Market." Typescript, Chicago Public Library, April 20, 1938.

South Water Street Market Must Go. Brochure, Chicago Plan Commission, 1917. Chicago Public Library.

Southwest Business Men's Association. *Advantages of the Water Front Area for a Market Center*. Memorandum submitted to the National Capital Park and Planning Commission. Washington, DC, 1926.

Spellman, Susan V. *Cornering the Market: Independent Grocers and Innovation in American Small Business*. Corby: Oxford University Press, 2016.

Stewart, Frank Mann. *A Half Century of Municipal Reform: The History of the National Municipal League*. 1950. Reprint, Westport, CT: Greenwood Press, 1972.

Stock, Catherine McNicol, and Robert D. Johnston, eds. *The Countryside in the Age of the Modern State: Political Histories of Rural America*. Ithaca, NY: Cornell University Press, 2001.

Stoll, Steven. *The Fruits of Natural Advantage: Making the Industrial Countryside in California*. Berkeley: University of California Press, 1998.

Strasser, Susan. *Satisfaction Guaranteed: The Making of the American Mass Market*. Washington, DC: Smithsonian Institution Press, 1989.

Sullivan, J. W. *Markets for the People: The Consumer's Part*. New York: Macmillan, 1913.

S. W. Straus & Company. *Chicago Produce District First Mortgage 6% Bonds: Information for Salesmen*. Chicago, S. W. Straus & Co., 1925. Chicago Public Library.

Tangires, Helen. "Adolf Cluss and Public Market Reform." In *Adolf Cluss, Architect: From Germany to America*, edited by Christof Mauch and Alan Lessoff, 57–67. Washington, DC: Historical Society of Washington, 2005.

———. "Contested Space: The Life and Death of Center Market." *Washington Histor*y 7, no. 1 (Spring/Summer 1995): 46–67.

———. “Feeding the Cities: Public Markets and Municipal Reform in the Progressive Era.” *Prologue: Quarterly of the National Archives and Records Administration* 29 (Spring 1997): 16–26.

———. *Public Markets*. Norton/Library of Congress Sourcebooks in Architecture, Design, and Engineering. New York: W. W. Norton, 2008.

———. *Public Markets and Civic Culture in Nineteenth-Century America*. Baltimore: Johns Hopkins University Press, 2003.

Tanner, Bonnie O. *The Entrepreneurial Characteristics of Farm Women*. New York: Garland, 1999.

Taxel, Laura, and Marilou K. Suszko. *Cleveland’s West Side Market: 100 Years and Still Cooking*. Akron, OH: University of Akron Press, 2012.

Taylor, Henry C. *A Farm Economist in Washington, 1919–1925*. Madison: Department of Agricultural Economics, University of Wisconsin-Madison, 1926.

Taylor-Leduc, Susan. “Market Gardens in Paris: A *Circulus Intelligent* circa 1790–1900.” In *Food and the City: Histories of Culture and Cultivation*, Dumbarton Oaks Colloquium on the History of Landscape Architecture XXXVI, edited by Dorothée Imbert, 301–32. Washington, DC: Dumbarton Oaks, 2015.

TenHoor, Meredith. “Decree, Design, Exhibit, Consume: Making Modern Markets in France, 1953–1979.” In *Governing by Design: Architecture, Economy, and Politics in the Twentieth Century*,” 216–36. Aggregate. Architectural History Collaborative. Pittsburgh: University of Pittsburgh Press, 2012.

———. “Markets and the Food Landscape in France, 1940–72.” In *Food and the City: Histories of Culture and Cultivation*, Dumbarton Oaks Colloquium on the History of Landscape Architecture XXXVI, edited by Dorothée Imbert, 333–51. Washington, DC: Dumbarton Oaks, 2015.

Tenny, Lloyd S. “The Bureau of Agricultural Economics: The Early Years.” *Journal of Farm Economics* 29, no. 4, pt. 2 (November 1947): 1017–26.

———. *Development and Growth of Standardization of Farm Products*. Washington, DC, 1927.

Tilly, Charles. “Food Supply and the Public Order in Modern Europe.” In *The Formation of National States in Western Europe*, edited by Charles Tilly, 380–455. Princeton, NJ: Princeton University Press, 1975.

Tolbert, Lisa C. “The Aristocracy of the Market Basket: Self-Service Food Shopping in the New South.” In *Food Chains: From Farmyard to Shopping Cart*, edited by Warren Belasco and Roger Horowitz, 179–95. Philadelphia: University of Pennsylvania Press, 2009.

Tracey-White, J. D. *Wholesale Markets: Planning and Design Manual*. FAO Agricultural Services Bulletin, no. 90. Rome, Italy, 1991.

Trelogan, Harry C. “Marketing Research in the United States during the Past Five Years.” *Journal of Farm Economics* 33, no. 4, pt. 2: Proceedings of the Annual Meeting of the American Farm Economic Association Meeting Jointly with the Canadian Agricultural Economics Society (November 1951): 932–43.

Umsted, E. O. “Where the Food Dollar Goes.” In USDA, PMA, *Marketing Activities* 10, no. 11 (November 1947): 3–6.

Vitiello, Domenic, and Catherine Brinkley. “The Hidden History of Food System Planning.” *Journal of Planning History* 13, no. 2 (May 2014): 91–112.

Wales, Hugh G. “The Kansas City Wholesale Fruit and Vegetable Market.” *Journal of Business of the University of Chicago* 19, no. 3 (July 1946): 161–75.

Walton, Thomas. “The 1901 McMillan Commission: Beaux Arts Plan for the Nation’s Capital.” PhD diss., Catholic University of America, 1980.

“Washington, D.C.—William C. Crow, Director of the Transportation and Facilities Research Division, Agricultural Research Service, is Presented with the Chevalier de l’Ordre du Mérite Agricole.” *USDA Employee Newsletter* 26, no. 4 (February 16, 1967): 1.

Washington Market Company. *A Statement on Behalf of the Company*. Washington, DC, 1913.

Wasserman, Suzanne R. “Markets.” In *The Encyclopedia of New York City*, edited by Kenneth T. Jackson, 729–31. New Haven, CT: Yale University Press, 1995.

Weld, Louis Dwight. *The Marketing of Farm Products*. New York: Macmillan, 1916.

Wells, O. V., et al. “The Fragmentation of the BAE.” *Journal of Farm Economics* 36, no. 1 (February 1954): 1–21.

Wentworth, Jennie Wells. “Public Markets.” Paper Presented at the Fifth Annual Congress, American Association for Promoting Hygiene and Public Baths, Baltimore, May 9, 1916. In *Pamphlets*, p.v.22, no. 11, New York Public Library.

Wernimont, Kenneth. “The Bureau of Agricultural Economics as a Functional Unit of the Federal Government.” Master’s thesis, American University, 1937.

White, John H. *The Great Yellow Fleet: A History of American Railroad Refrigerator Cars*. San Marino, CA: Golden West Books, 1986.

White, Richard. *Railroaded: The Transcontinentals and the Making of Modern America*. New York: W. W. Norton, 2011.

Whitman, Howard. “Filth in Our Food.” *Redbook* 99, no. 1 (May 1952): 36–39, 66–67.

——. “Filth in Our Food: No. 2. No Wonder the Housewife is Robbed.” *Redbook* 99, no. 2 (June 1952): 36–37, 98–99, 104.

——. “Filth in Our Food: Part 3. We Can Have Clean Markets!” *Redbook* 99, no. 3 (July 1952): 34–35, 64–68.

Williams, Mason B. *City of Ambition: FDR, La Guardia, and the Making of Modern New York*. New York: W. W. Norton, 2013.

Winerman, Marc, and William E. Kovacic, “Outpost Years for a Start-Up Agency: The FTC from 1921–1925.” *Antitrust Law Journal* 77, no. 1 (2010): 145–203.

Newspapers

Albany Evening News
Alexandria Gazette
The BAE (Bureau of Agricultural Economics) News
Baltimore Sun
The Beaver (OK) Herald
Brooklyn Daily Eagle
Buffalo Courier
Buffalo News
Buffalo Times
Cambridge (MA) Chronicle
Chicago Daily Tribune
Chicago Defender
Chicago Eagle
Chicago Packer
Chicago Tribune
Commission Merchant’s Daily Report
Denver Business Journal
Denver Post
Evening News (Newburgh, NY)
Herald Tribune
Houston Post

Kansas City Star
Lancaster Daily Intelligencer
Los Angeles Times
The Nation
National Provisioner
New York Herald
New York Times
Nonpartisan Leader (Fargo, ND)
Philadelphia Inquirer
Philadelphia Public Ledger
Rocky Mountain (CO) News
Schenectady Gazette
The Sun (New York, NY)
Washington Herald
Washington Post
Washington Star

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